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## Assessment of Caregiver's knowledge, Attitude, and Practice Regarding Palliative Care for Cancer Patients undergoing Chemotherapy in Port Said City

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### ABSTRACT

**Background:** Addressing palliative care needs requires caregivers to have sufficient knowledge of positive attitudes and reported practice toward palliative care. **Aimed** Assess of caregivers' knowledge, attitude, and practice regarding palliative care for cancer patients undergoing chemotherapy in Port Said City. **Subjects and Method:** **Design:** A descriptive design was utilized. **Setting:** This study was conducted at Al-Shifa Medical Complex at Port Said. **Subject:** A convenient sample of 155 caregivers attending with their cancer patients. **Tools:** Data were collected by using four Tools, **Tool I:** Caregiver questionnaire. A: Socio demographic characteristics of patient's cancer and cancer patients' caregivers. B: Medical history of patients **Tool II** – Caregiver Knowledge questionnaire to as caregiver knowledge about cancer and palliative care. **Tool III:** Attitude scale to assess attitude about palliative care. **Tool IV** – Reported practice about palliative care. **The Results:** Total knowledge regarding cancer of caregivers, Poor knowledge (<50%) was 34.8%, Average knowledge (50-75%) was 65.2%. The total level of knowledge regarding palliative care of caregivers (Poor <50%) was 61.3 % Average (50-75%) 36.1% Good (>75%) was 2.6 %.**Conclusion:** Total knowledge, attitudes, and practice of palliative care were low and there was a statistically significant strong positive correlation between total caregiver's knowledge of palliative care score and their total caregiver's practices and attitude and there was a statistically significant strong positive correlation between total caregiver's attitudes and practices. **Recommendations:** Designing and applying regular health education programs of palliative care for caregivers undergoing chemotherapy.

**Keywords:** Caregiver, Cancer patient, Chemotherapy, Palliative Care.

## **INTRODUCTION**

Palliative care is an approach that allows people with advanced cancer to maintain their quality of life in a way that is meaningful to them. It treats physical, practical, emotional, or spiritual symptoms to help the patient feel in control of the situation and make decisions about treatment and ongoing care (Vissers et al., 2021). Palliative care involves a range of services offered by medical, nursing, and allied health professionals, as well as volunteers and caregivers (Chochinov, 2020).

Palliative care may improve the quality of care delivered at the end of life and support healthcare clinicians and patients in discerning the optimal timing for transitioning to hospice services. In addition, the integrated model of care may facilitate the cessation of anticancer therapy at the end of life for patients who could suffer adverse outcomes from aggressive treatment (Cohn et al., 2019).

Caregivers are people who provide care to family members, life partners, or friends who are sick, either older adult patient's or disabled, without pay. Burden of care was defined as a negative impact of caring for impaired persons experienced by a family caregiver on the activity (objective burden) or feeling (subjective burden) that involves emotional, physical health, social life, and financial status (Morsi, Sabry & Ibrahim, 2022).

Older adults aged 65 years expected to be double in the next 2 decades worldwide it was predicted that around 20 million Egyptians will be categorized as elderly by 2050; with the rapid increase in the number of older adults the global cancer burden rapidly increased. In 2012, there were 14.1 million new cancer cases by 2035 it's estimated to increase the cancer cases to 24 million. In male older adult, it represents from 3.9 to 8.5 million (118% increase) while in female older adult represent from 2.8 to 5.7 million (104% increase) (CDC, 2020).

Cancer is a major cause of morbidity worldwide; with the growth of the population, it's estimated that cancer cases will increase from 14.1 million in 2012 to 21.6 million by 2030. It is the second leading cause of death worldwide after heart and vascular disease. During the period 2015, there were 17.5 million patients with cancer worldwide and 8.7 million deaths (WHO, 2023).

In Egypt the most common types of cancer in males are liver (18.7%), bladder (12.7%), non-Hodgkin's lymphoma (11.0%), and trachea, bronchus, and lung (8.2%), these represent 50.6% of all cancer in males. The commonest sites in females are breast (38.8%), non-Hodgkin's lymphoma (8.5%), liver (4.6%), and ovary (4.5%); all together represent 56.4% of cancer in females. The commonest sites for both genders are liver (23.8%), breast (15.4%), and bladder (6.9%) (Kamel et al., 2023).

Diagnosis of cancer and its treatment can have a highly destructive impact on the quality of life for the patients, their families, as well as other caregivers (Given, Given & Sherwood, 2022). Patients and their families need access to the required specialized support from the time that cancer is suspected through all the stages of treatment, recovery, to death and into bereavement to ensure that their physical, psychological, social, and spiritual needs are met effectively and to enable them to live and die in the place their choice. According to WHO, 40% of Cancer should be avoidable, 40% could be cured if detected early and the rest should be managed by palliative care (Northouse et al., 2022).

However, it is common for Egyptian patients, who do not respond to medications or lack the strength to undergo further treatment, to be neglected by their doctors; consequently, they are left to suffer alone without guidance or support. On the contrary, approximately half of the cancer patients in the eastern Mediterranean Region only visit a physician when their cancer has progressed to an advanced and often incurable stage (Metwaly et al., 2021). For them, the main focus of care should be placed on improving the quality of life. Therefore, their only realistic treatment option is palliative and end-of-life care.

Cancer is growing as a major cause of morbidity and mortality in the present time across the world including India. Chemotherapy regimens used for cancer treatment are immensely complex, and cancer patients are a susceptible population with little tolerance. Patients who are highly symptomatic either due to cancer or due to side effects of chemotherapy need more constant and increased duration of caregiving time as compared to those with mild symptoms. Hence, caregivers taking care of highly symptomatic cancer patients are more prone to psychological, physical, financial, and social reactions. The caregiver burden increases even further if they themselves are underprivileged with limited resources and/or are in poor health (Baskar et al., 2022)

The integration of palliative care early in the course of disease for patients with incurable malignancies has recently gained attention as a feasible and efficacious approach for not only improving quality of life and mood but also possibly extending survival. One plausible hypothesis for this survival benefit is that early palliative care enhances the management of adverse effects and complications from treatment, allowing patients to receive more regimens of chemotherapy. Alternatively, in targeting symptoms and assisting with treatment decisions (Bauman & Temel, 2022).

### **Significance of the study**

Palliative care is a service designed to prevent and relieve suffering for patients and families facing life-threatening illness, through early management of pain and other physical, psychosocial, and spiritual problems. There is growing recognition of palliative care as an integral aspect of cancer treatment, with the ability to improve quality of life and prevent unnecessary hospital admissions and the use of health services, especially when instituted early in the course of disease. Palliative care should be done early once the patient has metastatic disease, this is essential for optimal symptom control, expectation, illness understanding, and comprehensive care of the patient and the family (Redbrick et al., 2020).

The situation of PC in the Middle East including Egypt, is limited and does not present a clear picture of the cultural context, and still in the early stages and there are many obstacles to its development, namely, lack of professional knowledge, inadequate support of policymakers, and lack of access to opioids and financial resources. Despite these challenges, providing services at the community level, support of nongovernmental organizations, using trained specialists and a multi-disciplinary approach is an opportunity in Egypt (Halutzim et al., 2020).

### **The study aimed to**

Assess caregiver's knowledge, attitude, and reported practice regarding palliative care for cancer patients undergoing chemotherapy in Port Said City through:

## Objectives

1. Identify caregiver knowledge about palliative care of cancer patients undergoing chemotherapy at Port Said City.
2. Determine caregiver attitude about palliative care of cancer patients undergoing chemotherapy at Port Said City.
3. Investigate caregiver-reported practice about palliative care of cancer patients undergoing chemotherapy at Port Said City.

## SUBJECTS AND METHOD

### A. Technical Design

#### Study Design

A descriptive research design was utilized to meet the study aim.

#### Study Setting

This study was conducted at Al-Shifa Medical Complex Egypt health care authority at Port Said which located on the 23<sup>rd</sup> of July St in Port Said City. It provides general and special medical services that include patients' clinics, and chemotherapy. The oncology center consists of four floors. The second floor contains five outpatient clinics. The second floor consists of the daycare unit (30 beds for chemotherapy). The first clinic contains (8 beds) the second clinic contains (5 beds) the third clinic contains (6 beds) the fourth clinic contains (6 beds) fifth clinic contains (5 beds).

#### Study sample

Convenient sample of 155 of caregivers attending with their cancer patients

$$\underline{\text{Sample size (n) = } \frac{N}{1+N*d^2}} \quad \text{Gautam, Sharma (2020)}$$

N = Total population

d = Margin of error or precision

**According to the above formula**

$$N = 220 \text{ patient}$$

$$d = 0.05$$

$$n = 220/1+220* (0.05)^2 = 141$$

$$n = 141+14 \text{ (considering 10\% dropout of study participants)}$$

**Sample size (n) = 155 patient**

**Tools of data collection:** Data collection will involve using four tools:

**Tool 1: Caregiver questionnaire**

It was developed by the researcher after reviewing of recent to related literature in simple clear Arabic Abd EL-Mouhamed, Sadek & Mohamed (2022). Consisted of two parts:

**Part 1:** Socio-demographic characteristics of patient's cancer and cancer patients' caregivers. It consisted of questions related to (age, sex, educational level, marital status, occupation, number of family members.....).

**Part 2:** Medical history of patients: It included four questions about (diagnosis – duration of illness, type of treatment, and signs & and symptoms).

**Tool II – Caregiver Knowledge questionnaire**

It was developed by Abd EL-Mouhamed, Sadek & Mohamed (2022) in Arabic language by the researcher to assess caregivers' knowledge regarding about palliative care. It consisted of twelve questions about cancer and palliative care about (Definition of cancer and palliative care, causes of cancer, Started palliative care.....)

**Scoring system**

The knowledge score for each answer was given as follows: Correct and complete (2) Correct and incomplete (1) and Incorrect /don'tknow (0). Total score of knowledge = 46, For each area of knowledge, the score of the items was summed up and the total was divided by the number of the items, giving a mean score for the part. These scores were

converted into a percentage score. The total knowledge score was considered good if the score of the total knowledge was  $> 75\%$  ( $> 34$  points), considered average if it equals  $50 - 75\%$  ( $23 - 34$  points), and considered poor if it was less than  $50\%$  ( $< 23$  points).

### **Tool III: Attitude scale**

Likert scale It was developed by Ayed et al., (2015) in English and translated into Arabic by the researcher which included sixteen statements to evaluate caregivers' attitude toward palliative care of cancer patient.

### **Scoring system**

A score for each response on the statement of attitudes was given as follows: Always (2), sometimes (1), and rarely (0). Total score of attitude = 32, the score of the items was summed up and the total was divided by the number of the items, giving a mean score for the part. These scores were converted into a percentage score. The attitude was considered positive if the score of total attitudes  $> 75\%$  ( $> 24$  score), considered indifferent if it equals  $50 - 75\%$  ( $16 - 24$  points), and negative if it is  $< 50\%$  ( $< 16$  points).

### **Tool IV – Reported practice about palliative care**

It was developed by literature, Abd EL-Mouhamed, Sadek & Mohamed (2022) And the researcher; it was designed to assess caregivers' practices toward palliative care of cancer patients as reported by them. It included four aspects of palliative care. (A) Psychological aspects of care which included seven steps, (B) Cultural aspects of care which included five steps, (C) Spiritual aspects of care which included five steps and (E) Ethical and legal aspects of care which included four steps. This part measured pre and post the educational guidelines.

### **Scoring system**

The score for each practice was given as follows: Done (1) and not done (0). Total scores of practices = 61, the total practices were considered satisfactory if the score of the total practices  $\geq 60\%$  ( $\geq 36$  score), and considered unsatisfactory if it was less than  $60\%$  ( $< 36$  score).

## **B. Operational Design**

### **Tool's Validity**

It was ascertained by a jury of experts from family and community nursing faculty staff, to review the tools for clarity, relevance, and comprehensiveness.

### **Tool's Reliability**

Reliability of the tools was done by using Cronbach's Alpha coefficient test which revealed that each of the three tools consisted of relatively homogenous items as indicated by the moderate to high reliability of each tool. The internal consistency of knowledge was 0.92, attitudes was 0.89, and 0.94 for practices.

### **Fieldwork**

Field work was conducted at beginning, the studied caregivers in outpatient clinic were divided into 24 groups each group consisted of 5-7 caregivers, and then each group was gathered at outpatient clinic separately. take one day per week for each group as each group was given questionnaire in the same time the patient receiving chemotherapy treatment for 12 months from the beginning of March 2022 to the end of august 2022. Data was collected one day per week (Sunday).

First, the researcher visited the study settings and arranged with the nursing director for the actual implementation of the study, then evaluated the teaching room (outpatient clinic) in all study places after obtaining permission from the directors of study places. Then the researcher interviewed the caregivers and introduced herself then invited them to participate in the study. After their agreements to participate, written consent was obtained. To gain their cooperation, the researcher explained the purpose of the study.

The researcher assessed caregivers' knowledge needs using Tool II. Tool III was designed to assess the caregivers' attitudes regarding about palliative care. The researcher clarified the sheet (**Tool II, III**) to each caregiver and asked them to complete it. The tool was filled in about 10 minutes to 20 minutes. **Tool IV** was designed to assess the caregivers' Practice regarding about palliative care The tool was filled in about 10 minutes to 20 minutes. Finally, the researcher assessed caregivers' learning needs using



Tool II, Tool III and Tool IV The protocol of care was developed based on the identified needs and demands of caregivers gathered by the researcher, and in the light of the most recent literature.

### **Pilot Study**

A pilot study was conducted on 16 (Total =155) caregivers who were attended with their cancer patients and represented 10% of the total number of caregivers and they were excluded from the study sample. The pilot study was aimed to assess the feasibility, clarity, and applicability of the tools and also to determine the time needed for filling out the structured questionnaire. According to the results obtained from data analysis, the modifications, corrections, omissions, and additions were done. The tools took about 30 minutes to be filled.

### **Ethical Considerations**

Approval was taken from the Research Ethics Committee of the Faculty of Nursing; Port Said University The purpose of the study was explained to the participants before obtaining the written consent to share in the study. A brief explanation of the study was given to assure the participants that all information obtained would be kept strictly confidential and used only for the purpose of the study. Participants were informed that they had the right to participate or withdraw from the study at any time. Code numbers instead of the names of the participants were used for identification purposes. This measure ensured the participants would not be identified in the public reports. Code no. (NUR 6/8/2023 (28)).

### **C. Administrative Design**

An official letter will be issued from the Faculty of Nursing, Port-said University to the directors of Al-Shifa Medical Complex Egypt health care authority at Port Said to obtain their permission to conduct the study.

### **D. Statistical Design**

The data obtained will be organized, categorized, tabulated, and analyzed using SPSS (Statistical Package for Social Sciences), software program version 22, Descriptive as well as inferential statistics will be used Pearson coefficient correlation to detect the

relation between the variables of the study there was a statistically significant strong positive correlation between the total caregiver's knowledge toward palliative care score and their total caregiver's reported practices and attitude as  $p < 0.001$  and there was a statistically significant strong positive correlation between total caregiver's attitudes and reported practices as  $p < 0.001$ .

## RESULTS

**Table (1):** Represented that of caregivers is that (38.7%) were at age ranged between 20-years old. Moreover, (55.5%) of caregivers were females, (35.5%) of university education, and (59.4%) of them were married. Also, (38.1%) of patients have a relationship with a son and daughter, and (67.1%) of experience with a patient was more than 5 years.

**Figure (1):** Shows that was Total cancer caregivers' knowledge was 1% of good knowledge ( $>70\%$ ), and knowledge regarding palliative care ( $>70\%$ ) was 2.6% before guidelines implementation. And after guidelines implementation Total level of knowledge regarding cancer of caregivers was (40.6%) and that (41.3%) Total level of knowledge about palliative care. And overall cancer caregiver and palliative care was good improved after guidelines implementation.

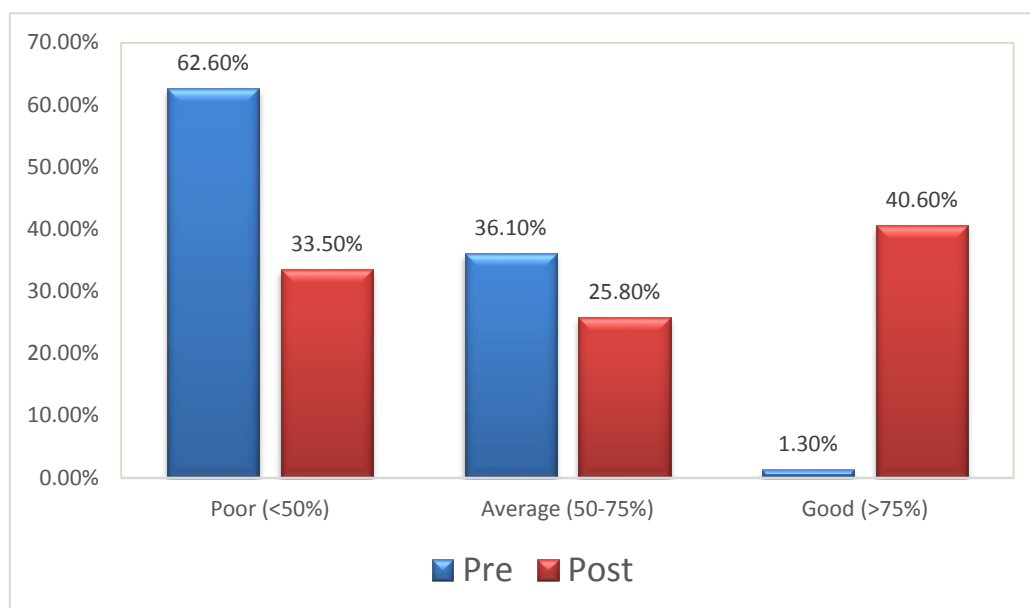
**Table (2):** shows that (25.2 %) of the study group had a negative ( $<50\%$ ) attitude while (72.3%) of them had a positive ( $>70\%$ ) attitude. There was a statistically significant total caregiver attitude assessment toward palliative care.

**Table (3):** Describes that (27.1%) of the studied caregivers had a satisfactory total level of reported practices regarding palliative care. While (72.9%) of them had an unsatisfactory total level of reported practice assessment. Shows that was statistically significant in the study group overall reported practices assessment.

**Table (4):** Illustrates that there was a statistically significant strong positive correlation between the total caregiver's knowledge toward palliative care score and their total caregiver's reported practices and attitude as  $p < 0.001$  and there was a statistically significant strong positive correlation between total caregiver's attitudes and reported practices as  $p < 0.001$ .

**Table (1):** Distribution of the studied caregivers according to demographic characteristics (n = 155)

Items	No.	%
<b>Age (years)</b>		
20 -	60	38.7
30 -	49	31.6
40 -	20	12.9
≥50	26	16.8
<b>Gender</b>		
Male	69	44.5
Female	86	55.5
<b>Educational level</b>		
Illiterate	15	9.7
Basic education	50	32.3
Secondary or technical education	35	22.5
University education	55	35.5
<b>Marital status</b>		
Single	59	38.1
Married	92	59.4
Divorced	2	1.3
Widowed	2	1.3
<b>Occupation</b>		
Don't work	20	12.9
Work	135	87.1
<b>Relation with the patient</b>		
Husband/ wife	57	36.8
Son/daughter	59	38.1
Brother/sister	34	21.9
Others (Mother)	5	3.2
<b>Years of palliative care for patients</b>		
< 5 years	109	70.3
5 – 10	41	26.5
>10	5	3.2
<b>Received information about palliative care</b>		
No	92	59.4
Yes	63	40.6
<b>Source of information (n=63)</b>		
Doctor	10	15.9
Nursing	38	60.3
Friends	2	3.2
Media	13	20.6
<b>Received Training on palliative care before</b>		
No	119	76.8
Yes	36	23.2
<b>Period of training</b>		
1-2 weeks	27	75.0
1 month	8	22.2
More than a month	1	2.8



**Figure (1):** Total Cancer and Palliative Care Knowledge

**Table (2):** Distribution of study sample according to total attitudes toward palliative care (n = 155)

Items	No.	%	p
Negative (<50%)	39	25.2	<0.001*
Indifferent (50-75%)	65	41.9	
Positive (>75%)	51	32.9	
<b>Total Score</b>	<b>(0 – 32)</b>		<0.001*
Min. – Max.	1.0 – 32.0		
Mean ± SD.	19.91 ± 7.17		
Median	16.0		
<b>% Score</b>			
Min. – Max.	3.13 – 100.0		
Mean ± SD.	62.22 ± 22.42		
Median	50.0		

**Table (3):** Distribution of study sample according to total practices toward palliative care (n = 155)

Items	No.	%	McN <sup>N</sup> <sub>p</sub>
<b>First: The physical aspect of care</b>			
<b>Treatment of pain</b>			
Unsatisfactory (<60%)	124	80.0	<0.001*
Satisfactory (≥60)	31	20.0	
<b>Treating shortness of breath</b>			
Unsatisfactory (<60%)	112	72.3	<0.001*
Satisfactory (≥60)	43	27.7	
<b>Treatment of nausea and vomiting</b>			
Unsatisfactory (<60%)	102	65.8	<0.001*
Satisfactory (≥60)	53	34.2	
<b>Treatment of constipation</b>			
Unsatisfactory (<60%)	110	71.0	<0.001*
Satisfactory (≥60)	45	29.0	
<b>Treatment of diarrhea</b>			
Unsatisfactory (<60%)	120	77.4	<0.001*
Satisfactory (≥60)	35	22.6	
<b>Total physical aspect of care</b>			
Unsatisfactory (<60%)	120	77.4	<0.001*
Satisfactory (≥60)	35	22.6	
<b>Second: Total The psychological aspect of care</b>			
Unsatisfactory (<60%)	110	71.0	<0.001*
Satisfactory (≥60)	45	29.0	
<b>Third: Total The social and cultural aspect of care</b>			
Unsatisfactory (<60%)	89	57.4	<0.001*
Satisfactory (≥60)	66	42.6	
<b>Fourth: Total The spiritual aspect of care</b>			
Unsatisfactory (<60%)	94	60.6	<0.001*
Satisfactory (≥60)	61	39.4	
<b>Fifth: Total The ethical aspect of care</b>			
Unsatisfactory (<60%)	91	58.7	<0.001*
Satisfactory (≥60)	64	41.3	
<b>Total practices</b>			
Unsatisfactory (<60%)	113	72.9	<0.001*
Satisfactory (≥60)	42	27.1	

**Table (4):** Correlation between knowledge, attitudes, and practices  
(n = 155)

Items	r <sub>s</sub>	P
Knowledge vs. Attitudes	0.293*	<0.001*
Knowledge vs. Practices	0.399*	<0.001*
Attitudes vs. Practices	0.567*	<0.001*

**r:** Pearson coefficient

\*: Statistically significant at  $p \leq 0.05$

## DISCUSSION

Palliative care is the active holistic care of patients with an advanced, progressive illness. Management of pain and other symptoms and provision of psychological, social, and spiritual support is paramount. The goal of palliative care is the achievement of the best of life for patients and their families. Many aspects of palliative care are also applicable earlier in the course of the illness in conjunction with other treatments. Palliative care goes beyond the traditional medical model to focus on psychosocial issues, spiritual matters, medical decision-making, and on the relief of suffering in all its dimensions throughout a person's illness (Elshamy, 2019).

The present study illustrated that more than one-third of the studied caregivers aged range of twenty or more years old. Regarding gender more than half females. And one-third of the studied caregivers were aged twenty years old. More than one-third of them had a university education. Also, revealed that more than two-thirds of the studied caregivers had less than five years of experience in palliative care.

Concerning cancer caregivers' total level of knowledge between poor and moderate, this results in the same line with Shah, et al., (2020). The study entitled "Perceptions, Knowledge, and attitudes towards the concept and amongst caregivers: A Cross-sectional Survey in Karachi" in Pakistan reported that most of the caregivers had between poor and moderate knowledge about cancer. This might be due to concise presentation using a simple language-wide explanation and clear educational methods such as posters power points handouts instructional media such as videos and available

information provided by easily accessible (internet-scientific sites) and spread awareness programs.

Regarding the total level of knowledge of caregivers regarding palliative care, it was between poor and moderate total level of knowledge. This result is supported by, Shah, et al., (2020). The study entitled "Perceptions Knowledge and Attitudes towards the Concept and Approach of palliative care amongst Caregivers: a cross-sectional Survey in Karachi" in Pakistan, reported that most of the caregivers had an enhanced understanding of the palliative care approach. This may be available information provided by easily accessible (| Internet – Scientific sites - TV) and the researcher had provided enough time for discussion and answer questions more clarification.

According to caregivers' attitudes toward palliative care, the study revealed that There was a statistically significant difference in all items of caregivers' attitudes regarding palliative care. The study same line with Yun et al., (2018) the study entitled is "Attitudes toward early palliative care in cancer patients and caregivers" in Korean nationwide survey. They reported that statistically significant had positive attitudes toward early palliative care after education intervention. From the researcher's point of view, it might be due to sufficient perception of palliative care knowledge and more awareness of caregivers to apply attitude about palliative care and because the sample of caregivers was young and most ready to acquire knowledge.

Concerning to total caregivers ` practice level regarding palliative care the finding of this study clarified that, the studied caregivers had unsatisfactory levels of total practice regarding palliative care. This result is congruent with Bibi et al., (2020) in Pakistan.the study entitled "Family caregivers' knowledge, attitude and practices towards palliative care at homes of Lahore" in Pakistan. They reported that most of the studied family caregivers had an unsatisfactory level of total practices regarding palliative care. This could be due to performing practice and un follow-up it and lack of clinical skills to palliative care and perform assessment and follow up of symptoms have a lack of clinical skills to palliative care furthermore lack of facilities like unavailability of palliative care guidelines books, procedures books about dimensions of palliative care to patients with cancer all these factors contributed to the unsatisfactory practice level of family caregivers regarding palliative care among patients with cancer.

Concerning total knowledge, the current study illustrated that the caregiver's knowledge had a statistically significant strong positive correlation between total caregiver's knowledge toward palliative care score and their total caregiver's reported practices and attitude and there was a statistically significant strong positive correlation between total caregiver's attitudes and reported practices. This result is in accordance with Metwaly and Mohamed, (2021), who studied the high statistically significant improvement effect of palliative care programs on nurses' performance regarding cancer and patients' outcomes in Egypt. They reported that the level of knowledge, the present study demonstrated that most of the studied nurses had statistically significant strong positive correlation between knowledge and attitude and practice. There was a statistically significant strong positive correlation between total caregiver's attitudes and practices in the assessment phase. This might be owing to palliative care centers or services not being well integrated within the health care system in Egypt, and is based on the efforts of individuals rather than health care policy. Egypt is a country with isolated palliative care provision: the development of palliative care is patchy in scope and not well supported, the number of hospice and palliative care services is low, a national organization for palliative care does not exist, palliative care is not included in the national healthcare agenda, and the education of healthcare personnel on palliative care is insufficient and when available palliative courses it is very expensive and not available in any country.

## **CONCLUSION**

*Based on the results of the present study, the following can be concluded:*

Total knowledge, attitudes and practice of palliative care was low and there was a statistically significant strong positive correlation between total caregiver's knowledge toward palliative care score and their total caregiver's practices and attitude and there was a statistically significant strong positive correlation between total caregiver's attitudes and practices.

## **RECOMMENDATIONS**

*Based on the findings of this study, the following recommendations are made:*

1. Encourage the establishment of more palliative care centers in areas where there is little or no access to palliative care.



2. Ensuring that the elderly patient has equitable access to palliative care services.  
Ensuring that Outpatient clinics are quiet, clean, and comfortable.
3. Enhancing the trust relationship between elderly patients and caregivers.
4. Designing and applying regular health education programs of palliative care for caregivers undergoing chemotherapy.

**Further studies** are needed to implement educational intervention programs about palliative care provided by Caregivers of Cancer Patients Undergoing Chemotherapy.

### **Limitation of the Study**

It was difficult to gather all caregivers in the same time.

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## تقييم معلومات واتجاهات وممارسات مقدمي الرعاية التلطيفية لمرضى السرطان الخاضعين للعلاج الكيماوي في مدينة بورسعيد

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### الخلاصة

تتطلب معالجة احتياجات الرعاية التلطيفية أن يكون لدى مقدمي الرعاية معرفة كافية بالمواقف الإيجابية والممارسات المبلغ عنها تجاه الرعاية التلطيفية. ساعدت هذه الدراسة في تقييم الرعاية التلطيفية بين مقدمي الرعاية لمرضى السرطان الذين يخضعون للعلاج الكيماوي في مدينة بورسعيد. وكان التصميم وصفي للعينة عينة مناسبة مكونة من 155 من مقدمي الرعاية الذين يحضرون مع مرضى السرطان. المكان: أجريت هذه الدراسة في مجمع دار الشفاء ببورسعيد. أدوات جمع البيانات: البيانات تم جمعها باستخدام أربعة أدوات الأداة الأولى: استبيان مقدمي الرعاية. ج: الخصائص الديموغرافية الاجتماعية لمرضى السرطان ومقدمي الرعاية لمرضى السرطان. ب: التاريخ الطبي للمرضى. الأداة الثانية: استبيان معرفة مقدمي الرعاية لمعرفة مقدمي الرعاية بالسرطان والرعاية التلطيفية. الأداة الثالثة: مقياس الموقف لتقييم الموقف بشأن الرعاية التلطيفية. الأداة الرابعة: الممارسة المبلغ عنها حول الرعاية التلطيفية. النتائج: المعرفة الإجمالية فيما يتعلق بالسرطان لدى مقدمي الرعاية، كانت المعرفة الضعيفة (>50%)، 34.8%، ومتوسط المعرفة (50-75%)، 65.2%. وكان إجمالي مستوى المعرفة فيما يتعلق بالرعاية التلطيفية لمقدمي الرعاية (ضعيف >50%) 61.3% متوسط (50-75%) 36.1% جيد (<75%) 2.6%. الاستنتاج: إجمالي المعرفة والمواقف والممارسة في مجال الرعاية التلطيفية كانت منخفضة وكانت هناك علاقة إيجابية قوية ذات دلالة إحصائية بين إجمالي معرفة مقدمي الرعاية تجاه درجة الرعاية التلطيفية وممارسات واتجاهات مقدمي الرعاية الإجمالية وكان هناك علاقة إيجابية قوية ذات دلالة إحصائية بين إجمالي اتجاهات وممارسات مقدمي الرعاية. التوصيات: تصميم وتطبيق برنامج التثقيف الصحي المنتظم من الرعاية التلطيفية لمقدمي الرعاية الذين يخضعون للعلاج الكيماوي

**الكلمات المرشدة:** مقدمي الرعاية، مريض السرطان، العلاج الكيماوي، الرعاية التلطيفية.