

## Quality of Life and Coping Behavior among Elderly Suffering from Cancer

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### Abstract:

**Background:** Cancer is a group of diseases characterized by the uncontrolled growth and spread of abnormal cells. The percent of older people in Egypt was 6.9% in 2015 and projected to be 9.2% in 2020.

**Aim:** the aim of the current study was to assess the quality of life and coping behavior among elderly suffering from cancer.

**Design** A descriptive correlation research design. **Sample:** A purposive sampling.

**Setting:** This study was conducted at oncology clinic at the University Hospital and oncology clinics at the heart and chest Hospital at sednawy in Zagazig City.

**Tools:** Three tools were used for data collection; Tool I: Structured interview questionnaire and Medical history. Tool II: Jaloweic Coping Scale. Tool III: The European Organization for Research and Treatment of Cancer Quality of life Questionnaire -C30 Version 3.0 Questionnaire.

**Results** of the present study revealed that The mean age patients are  $68.35 \pm 6.39$ . There is a statistically significant positive correlation between affective oriented coping behavior score and problem oriented coping [P: <0.001] and there is a statistically significant positive correlation between problems oriented coping behavior score and global health status [P: <0.001].Elderly cancer patients were lower in functional domains of quality of life as physical, role, emotional and social domains but higher in cognitive domain.

**Conclusion:** The study concluded that elderly patients used affective oriented coping behaviors more than problem oriented coping behaviors when adapt with their illness and they had poor quality of life, poor affective and poor problem oriented coping behavior.

**Recommendations:** Teaching elderly cancer patients how to use problem solving coping behavior rather than emotional coping behavior.

**Key words:** Elderly patient, Cancer, Quality of life, and Coping behavior.

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### I. Introduction

Aging is defined as a decline or loss of adaptation with increasing age, caused by a time-progressive decline; also it can be defined as a continuous process from birth to death, which encompasses physical, social, psychological, and spiritual changes. While most evolutionary biologists define aging as an age-dependent or age-progressive decline in intrinsic physiological function leading to an increase in age-specific mortality rate (i.e., a decrease in survival rate) and a decrease in age-specific reproductive rate.<sup>[1]</sup>

Cancer, known medically as a malignant neoplasm, is a broad group of various diseases, all involving unregulated cell growth. In cancer, cells divide and grow uncontrollably, forming malignant tumors, and invade nearby parts of the body. The cancer may also spread to more distant parts of the body through the lymphatic system or bloodstream. Not all tumors are cancerous. Benign tumors do not grow uncontrollably, do not invade neighboring tissues, and do not spread throughout the body. There are over 200 different known cancers that afflict humans.<sup>[2]</sup>

Cancer not only affects patients physically, but it may also impact the quality of life (QoL) of cancer survivors negatively.<sup>[3]</sup> Recently, much attention has been paid to the negative impact of cancer and its treatment on the QoL in cancer patients. Several reports have indicated that greater QoL impairment in patients with cancer may be attributable to treatment side effects, cancer symptoms, and psychological distress.<sup>[4]</sup> Quality of life is a broad multidimensional concept that considers a person's physical, emotional, social, and spiritual well-being. According to data from the National Health Interview Survey, approximately one in four cancer survivors have a decreased quality of life due to physical problems and other due to emotional problems. Physical well-

being is the degree to which symptoms and side effects, such as pain, fatigue, and poor sleep quality, affect the ability to perform normal daily activities.<sup>[5]</sup>

Coping is perceived and behavioral effort in order to adjust in specific external or internal requirements, which exceed the individual's management resources. And defined coping as a deliberate, planned, and psychological effort to manage stressful demands.<sup>[6]</sup>

A person's coping behavior plays an important role in resolving difficult conflict situations that may arise in various spheres of life. In Heim's opinion, coping behavior shows itself in the cognitive and emotional actions that a person takes to overcome difficult situations and to adapt to existing circumstances.<sup>[7]</sup>

A geriatric assessment is a multidimensional, interdisciplinary patient evaluation that leads to the identification of the general health status, including medical, but also functional, cognitive, social, nutritional, and psychological parameters. Geriatric assessments are important for four reasons. First, they can detect geriatric problems, including those that are not routinely evaluated by treating physicians. Second, they provide prognostic value. "Geriatric parameters independently predict overall survival in various settings and various diseases. Third, geriatric assessments have predictive value, independent from classic oncologic predictors, for severe treatment-related toxicity."<sup>[8]</sup>

The optimal geriatric parameters, including cut-off points, to predict severe treatment-related toxicity or modify the therapeutic approach have not yet been established for the different cancer types or treatment options. Finally, geriatric assessments influence treatment decisions, helping clinicians choose the appropriate treatment intensity, as well as interventions for improving quality of life (QOL).<sup>[9]</sup>

### **1.1 Significance of the Study**

Cancer is one the leading causes of death worldwide. In 2012, there were 14 million new cases and 8.2 million cancer-related deaths worldwide. The number of new cancer cases will rise to 22 million within the next two decades.<sup>[10]</sup>

In Egypt, the National Registry of Tumors began in the census of cases of cancer in Egypt and found through the latest statistics, about 150,000 cases of cancer new each year per hundred thousand people that is to say there are about 140,000 new cancer cases annually.<sup>[11]</sup>

The effect of cancer on elderly may have physical or emotional disturbance as a result of this disease or its treatment. Many conventional approaches can help people to cope with these disturbances. For example, counseling and coping behavior is one of the nursing roles that may help people who are distressed about being diagnosed with cancer. Some people find that complementary approaches also help them cope with cancer and improve their quality of life.<sup>[12]</sup> For the lack of researches on the subject of cancer in the elderly in the city of Zagazig. Hence the aim of the study was assess the quality of life and coping behavior among elderly suffering from cancer in Zagazig city.

### **1.2 Aim of the study**

The aim of the current study was to assess Quality of Life and Coping Behavior among Elderly Suffering from Cancer through:

- Assess the quality of life and coping behavior among elderly suffering from cancer.
- Determine the relationship between quality of life and coping behavior among elderly suffering from cancer.

### **1.3 Research Question:**

- What are the quality of life and coping behavior among elderly suffering from cancer?
- Is the relationship between quality of life and coping behavior among elderly suffering from cancer?

## **II. Subjects and methods**

### **2.1 Research design:**

A descriptive research design was used to conduct the present study.

### **2.2 Research setting:**

This study was conducted at oncology clinics in Zagazig University Hospitals. The oncology clinic at the University Hospital consists of awaiting area, and two rooms for nursing staff and doctors. The oncology clinics at the heart & Chest Hospital at sednawy consisted of two parts, the first part accelerated device setting, and it consisted of awaiting area and four rooms for radiology, nursing staff and doctors. The second part consisted of three waiting area, and twelve rooms for chemotherapy, examination for chemotherapy doses, radiofrequency ablation, professors, nursing staff, radiographers, cobalt device, archive, bathroom and three rooms for doctors.

### 2.3 Subjects:

The subjects of the existing study were 110 elderly patients at Zagazig University Hospitals who were randomly selected according to the following inclusion criteria: both sexes, 60 years old and more than, willing to participate in the study, able to communicate, diagnosed with cancer and free from any other communication problems.

### 2.4 Sampling technique:

A purposive sample consisted of 110 elderly patients. The sample size was calculated by using the software Epi Info package, Version 6.04. It was expected prevalence of cancer on elderly is 55.2% in 2015.<sup>[13]</sup> The elderly population with cancer admitted to the oncology outpatient clinic in last year during 2016 was 1080 cases, at confidence level 95% and a power of the test 80%. 10% added to sample size for missed cases. Thus; the total sample included 110 elderly patients.

### 2.5 Tools of data collection

**Tool I: Structural interview questionnaire** was developed by the researcher to collect the necessary data: It consist of two parts: First Part: Socio-demographic characteristics of the studied elderly. Second Part: Medical history of the studied elderly.

#### Tool II: Jaolwec coping scale

It was developed by Jalowiec and Power in 1981. It was used to identify coping scale behaviors of elderly patients with chronic diseases. It was translated into Arabic and used by Abd El Meguid<sup>[14]</sup> and was approved for validity and reliability by Fadila.<sup>[15]</sup> It indicated that the scale has a reliability of 0.78. The scale used the 5-point Likert scale with response options of always (4), often (3), about half the time (2), occasionally (1) and never (0). The higher score indicates greater use of that particular coping behavior.<sup>[16]</sup>

#### Scoring system:

This scale detected to assess coping behaviors of elderly suffering from cancer. It consists of 40 items, classified into 15 problem oriented coping behaviors, which focus on problem resolution as look at the problem objectively, and accept the situation as it is. And 25 affective oriented behaviors, which are aimed to handle the distressing emotions as worry, want to be alone, and work off tension with physical activity. That indicates if

- 1) Affective coping behavior is > (15) 60% of total score 25 indicated → Good Affective coping.
- 2) Affective coping behavior is < (15) 60% of total score 25 indicated → Poor Affective coping.
- 3) Problem oriented coping behavior is > (9) 60% of total score 15 indicated → Good Problem oriented coping.
- 4) Problem oriented coping behavior is < (9) 60% of total score 15 indicated → Poor Problem Oriented Coping

#### Tool III: The European Organization for Research and Treatment of Cancer Quality of life Questionnaire (EORTC-QLQ-C30 Version 3.0):<sup>[17]</sup>

The European Organization for Research and Treatment of Cancer Quality of life Questionnaire (EORTC-QLQ-C30). It was developed by The EORTC Quality of life Study Group in 1988: It consists of five functional scales (physical, role, cognitive, emotional, and social), three symptoms scales (fatigue, pain, nausea, and vomiting), global QOL scale, and six single questions assessing additional symptoms commonly reported by cancer clients (dyspnea, insomnia, appetite loss, constipation, diarrhea and financial difficulties). It is translated into Arabic by the European Organization for Research and Treatment of Cancer.

#### Scoring system:

The scale is composed of 30 questions. The questions from 1 to 28 are coded with the same response categories namely not at all (1), a little (2), quite a bit equal (3) and very much (4). Questions 29 and 30 coded with very poor (1) to Excellent (7). A high scale score presents a higher response level in global health only. The QLQ-C30 was scored according to the recommended EORTIC procedures. All raw scores converted to lie in a range between 0 and 100. For the functioning scales and the global QoL scale, a higher score for the global health/QoL scale and the functional subscale represents a better level of functioning, while a higher score on the symptom scales and single items indicates a greater degree of symptom logy. That indicated → Poor Quality Of Life was < (18) 60% of total score 30.

Good Quality Of Life was > (18) 60% of total score 30.

### 2.6 Pilot study

A pilot study was carried on the elderly patients at the oncology outpatient clinic representing about 10% of the study subjects (11 elderly patients). The purposes of the pilot study were to test applicability, feasibility, practicability of the tools. It also, helps to estimate the time needed to complete the questionnaire sheet. All of

them received a clear explanation for the study purpose. According to the results of pilot study no modification made to the tools. Those who shared in the pilot study were involved in the studied sample.

## **2.7 Fieldwork**

Once permission was granted to proceed with the study, the researcher started to prepare a schedule for collecting the data. Each elderly patient was interviewed individually by the researcher who introduced himself and explained the aim of the study briefly, and reassured them that information obtained is strictly confidential and would not be used for any purposes other than research. After that, the oral approval was obtained to collect the necessary data. The researcher used to go to oncology outpatient clinic and waits in the waiting room for interviewing the elderly who fulfills the criteria. The study tools were answered by each patient during the interview, and the time needed ranged from 20 to 30 minutes, according to understanding and cooperation of the elderly. The fieldwork was executed over the period from March 2017 up to June 2017; three days per week (Monday, Tuesday, and Wednesday) from 9.00 AM to 12.00 MD.

## **2.8 Ethical considerations:**

The study proposal was approved by the ethics committee of the scientific research of the faculty of nursing at Helwan University. Oral informed consent obtained from each elderly who agree to participate in the study before conducting the interview. They were given a verbal description of the aims of the study, the benefits, and non-participation or withdrawal rights at any time without giving any reasons. The elderly were informed that their participation in this study was voluntary, no names were included in the questionnaire sheet and anonymity of each elderly was protected by the allocation of code number for each elderly. The elderly were assured about the confidentiality of the information gathered and its use only for their benefits and for the purpose of the study.

## **2.9 Data management:**

Data entry and statistical analysis were done using SPSS 20.0 statistical software package. Data were presented using descriptive statistics in the form of frequencies and percentages for qualitative variables, and means and standard deviations and medians for quantitative variables. Cronbach alpha coefficient was calculated to assess the reliability of the developed tools through their internal consistency. Qualitative categorical variables were compared using chi-square test. Whenever the expected values in one or more of the cells in a 2x2 tables was less than 5, Fisher exact test was used instead. Spearman rank correlation was used for assessment of the inter-relationships among quantitative variables and ranked ones. In order to identify the independent predictors of the various stress and personality scores, multiple linear regression analysis was used and analysis of variance for the full regression models was done. Statistical significance was considered at p-value <0.05.

## **III. Results**

From the current study, about 70% of the elderly subject in the study sample was ranged between 60 up to 69 years and 62.7% were female, married and living in rural area with their family depending on pension as a source of income and 53.6% of them were illiterate.

**Table 1** reveals quality of life among the studied elderly, it was observed that the five functional scales ranged from (9±1.91) to (11.85±2.78), on relating the three symptom scales measuring fatigue, pain, nausea & vomiting were ranged from (2.33 ± 0.62) to (6.19 ± 0.80) and the six single item measures insomnia, appetite loss, constipation, dyspnea, diarrhea and financial functioning were ranged from (1.92 ± 0.62) to (4.25 ± 0.94). The total mean score of quality life among the studied elderly was (61.75±9.16), **Figure 1** portrays that 71.8% of the studied elderly had poor QOL and 28.2% of them had good QOL

Regarding distribution of the studied elderly according to affective oriented and problem oriented coping behavior, **Table 2** presents the frequency of using affective coping behavior among the studied elderly, the table pointed that the most frequently used affective oriented coping behaviors were (pray, trust in God) with the higher mean score 3.41 and was always used by (53.6%) of the elderly, followed by (taking drugs) 3.14 and was often used by (63.6%). The statement that denotes (hope that things will get better) had mean scores of 2.94 and was often used by 41.8%. On the other hand, the less frequently used affective oriented coping behaviors was (drink alcoholic beverages) with mean score 0 and was never used by (100%). And **Table 3** clarifies the frequency of problem oriented coping behavior among the studied elderly, it was observed that the most used problem oriented coping behavior was (draw on past experience to help you handle the situation) the mean score of 2.2 and was occasionally used by (71.8%) of elderly, followed by (let someone solve the problem) with mean score of 1.45 and was occasionally used by (58.2%) of them. On the other hand, the less frequently used problem oriented coping behavior was (actively try to change the situation) with mean score of 0.53 and was

never used by (61.8%) of studied elderly, followed by (accept the situation as it is) with the mean score of 0.58 and was never used by (63.6%), **Figure 2** displays that the total coping behavior among elderly (62.7%) of the studied elderly had poor coping behavior and 37.3% had good coping behavior adaptation.

Concerning correlation between total QOL and elderly characteristics, **Table 4** indicates a statistically significant positive correlation between total QOL and age and duration of disease. On the other hand, it shows a statistically significant negative correlation between total QOL and global health status, self-assessment of QOL, problem oriented coping behavior and affective oriented coping behavior.

As regard Correlation between Affective oriented coping behavior and elderly characteristics, **Table 5** demonstrates a statistically significant negative correlation between affective oriented coping behavior score and age, duration of diseases and total QOL. On the other hand, it shows a statistically significant positive correlation between affective oriented coping behavior score and global health status, self-assessment QOL and problem oriented coping.

Regarding Correlation between Problems oriented coping behavior and elderly characteristics, **Table 6** clarifies a statistically significant negative correlation between Problem oriented coping behavior score and age, duration of disease and total QOL. On the other hand, it shows a statistically significant positive correlation between problems oriented coping behavior score and global health status, self-assessment of QOL and affective oriented coping behavior.

#### IV. Discussion

Cancer is most frequently diagnosed among individuals aged 65 years and older, and the number of older patients with cancer will increase in the future as result of increasing life expectancy of the population.<sup>[18]</sup> Cancer not only affects your body, but it also has an impact on your thoughts, feelings, beliefs, and attitudes. Because the cancer experience exposes you to the fragility of life, you may re-prioritize things that are important to you, do things you've left undone, and find a new perspective on how to live in the present. Being diagnosed with cancer can be an emotional rollercoaster. As you begin to make decisions regarding your medical care, try to remain aware of how you feel on a social, emotional, and spiritual level.<sup>[19]</sup>

Quality of life in older patient with cancer is an important concept; crucial to decisions made regarding the management of elderly patients, and can lead to the prolongation of one's life, but often with consequences. There is much debate around quality of life in older patient with cancer.<sup>[20]</sup>

Concerning demographic characteristics, in the present study the age of study subject was ranged between 60 up to 69 years, with a mean of  $68.35 \pm 6.39$  years. These findings go in line with a study done in china by **Li et al**<sup>[21]</sup> clarified that the mean age was  $63 \pm 12.9$  in rectal cancer patients after radical surgery. These findings are contradictory with the result conducted in Turkey by **Akyol et al**<sup>[22]</sup> who reported that, the mean patient age was  $55.68 \pm 11.387$  years. These differences might be due to difference of life expectancy between Egypt and Turkey.

As for sex, female constituted more than two third of the studied elderly. It can be explained by that females are more likely to be at high risk for cancer especially breast cancer. Breast cancer is the leading cause of cancer –related death in women ages 55to 74(**Pape-Zambito et al.**)<sup>[23]</sup> This association revealed by a study done in Brazil by **Andrade et al**<sup>[24]</sup> demonstrated that the female sex was more than one half of the studied subjects and more likely at high risk for breast cancer.

Concerning the educational level, more than one half of the studied elderly was illiterate. This might be attributed by the fact that the elderly had fewer opportunities for education in the past. This result is nearly consisted with this a study conducted in India by **Puri et al**<sup>[25]</sup> who found that about half of the cancer patients were illiterate.

Regarding marital status, approximately two third of the studied elderly subject were married. In accordance with these findings the study done in Asia by **Omran**<sup>[26]</sup> identified that about two thirds of the studied elderly were married female. Similarly in Turkey by **Karabulutlu**<sup>[27]</sup> And **Alsharbatti et al**<sup>[28]</sup> in Emirati demonstrated that two third of the studied elderly were married.

Quality of life is composed of physical, role, emotional, cognitive, social and six symptom items. In this study, the studied elderly had lower scores in functional scale, physical function and role function while they had a higher scores symptom logy this could be related to that cancer is debilitating illness which influence all aspects of quality of life among elderly. The finding is in congruence with a study in Denmark by **Esbensen & Thomsen**<sup>[29]</sup> founded that the elderly group had lower scores in physical function and role function while in the symptom logy scale they had a higher score, indicating more problems and complaints.

As regard, the functional dimensions of quality of life, the results founded that the elderly cancer patients had lower emotional functioning result from more dependent on others as they were feeling more depending on others and over load on caregiver. This result similar to a study done in Greece by **Geogakopoulos et al**<sup>[30]</sup>

concluded that the lowest score of functional dimensions among the studied elderly was the emotional functioning.

Concerning social domains of quality of life in this result, founded that the elderly cancer patients were lower social functioning also. This can be due to the elderly person considering chronic diseases especially cancer is stigma so relationships with others were decreased. Similarly to a study by **Schlosser & Ceolim**<sup>[31]</sup> done in Brazil revealed that the social domains were the most affected. While the elderly patients were higher in cognitive functioning because the occurrence of the disease messed all their thinking. This is confirmed through a study done in Brazil by **Luciano et al**<sup>[32]</sup> clarified that the elderly cancer patients were have higher cognitive functioning

Regarding, quality of life of elderly cancer patients, it was observed the highest three symptoms were (fatigue, pain, nausea& vomiting) and the highest six single symptoms were (insomnia, appetite loss, dyspnea, diarrhea and financial functioning) due to side effects of cancer treatment on body system. The same point is confirmed by **Li et al**<sup>[33]</sup> in China, demonstrated that the highest score was three symptoms as (fatigue, pain, nausea& vomiting) and other highest score was in six single symptoms (insomnia, appetite loss, dyspnea, diarrhea and financial functioning) especially financial impact on elderly cancer patients and fatigue were the top two highest scores among all symptoms-related scales of EORTC QLQ C-30.

The current study, revealed that the most frequently used affective oriented coping behaviors by the elderly were the statement of pray, trust in God, taking drugs and hope that things will get better because Egyptians believe that the disease represent as a test from Allah to assess their patience and faith. This result is similar to a study in Mansoura by **Saad**<sup>[34]</sup> revealed that the statement of pray, trust in God and hope that things will get better were the most frequent used by the studied elderly.

While, the most frequently used problem oriented coping behaviors by the studied elderly were the statement of draw on past experience to help you handle the situation followed by statement let someone solve the problem. Because cancer disease isn't easy to deal with it, So elderly patients depend on past experience and other people to accommodate.

In accordance with these findings in Japan by **Chen et al**<sup>[35]</sup> who found that the items draw on past experience to help you handle the situation followed by statement let someone solve the problem were the most frequently used problem oriented coping behaviors among the studied elderly patients.

Regarding Correlation between Problem oriented and affective oriented coping behavior and quality of life, the current study results demonstrated that a statistically significant positive correlation between problems oriented coping behavior score and total score of QOL while, it revealed a negative correlation between affective oriented coping behavior score and total score of QOL. These findings go in line with a study conducted by **Maleknia & Kahrazei**<sup>[36]</sup> revealed that a significant positive relationship between problem oriented coping behavior and QOL including total symptoms and functional scale while, affective (emotional) oriented coping behavior had a significant negative correlation with total symptoms and functional dimension of QOL. Similarly a study by **JOVIĆ et al**<sup>[37]</sup> in Croatia, founded that significant correlations between coping behaviors and different aspects of health-related quality of life.

This is clarified by that the studied elderly who had good QOL, had ability to solve problems lead to increase self-esteem and ignore negative feelings toward disease and vice versa. In agreement with this a study conducted by **Rezaei & Saleh**<sup>[38]</sup> in Iran clarified that the statistically positive relationship between problem-oriented coping style and self-assessment of quality of life.

The current clarified that there was a statistically significant positive correlation between problems oriented coping behavior score and global health status. That means elderly who had poor global health status score, had poor problem oriented coping behavior. The same point is confirmed by **Thweib**<sup>[39]</sup> in Palestine founded that there is a statistically significant positive relation between global health status and use of problem oriented coping behavior.

Concerning Correlation between total QOL and affective oriented coping behavior, the current study results clarified that, there is a statistically significant negative correlation between total QOL and affective oriented coping behavior. The findings is in congruence with a study by **Santos & Amauri**<sup>[40]</sup> in Brazil, demonstrated that affective (emotional) oriented coping was independently and negatively associated with QOL dimensions and this results indicate that patients with high emotional-oriented coping scores should be seen at risk for poor QOL. Additionally a study conducted by **Shakeri et al**<sup>[41]</sup> in India.

The current study findings revealed that there was a statistically significant positive correlation between affective (emotional) oriented coping behavior score and self-assessment of quality of life. It can be illustrated through the studied elderly who depended on their emotions when dealing with symptoms of cancer treatment that improve self-assessment of quality of life. This is similar to a study done in Romania by **Craciuna**<sup>[42]</sup> demonstrated that the variables coping strategies (affective oriented) emotion were positively significantly related to self-assessment of quality of life.

Finally, the current result findings revealed that there was a statistically significant positive relation between affective oriented coping behavior and global health status. The findings are in congruence with a study by **Szramka-Pawlak et al** [43] in Poland founded that positive relation between affective oriented coping behavior and global health status.

### **V. Conclusion**

Cancer has a negative impact not only on the physical role of the patients but also on the psychosocial aspects and QoL of the elders. Based on the present study findings, it was concluded that the mean age of the studied sample was 60-85years, more than half of the samples were female and living in rural, the majorities were married and illiterate. Breast cancer, lung cancer, and colon cancer are the most common types of cancer. Elderly patients used affective oriented coping behaviors more than problem oriented coping behaviors when adapt with their condition. There was a statistically significant relation between affective oriented coping behavior and problem oriented coping behavior. In the light of the main study findings, it was concluded that the elderly patients had a poor QoL and symptom problem. Also there was a statistically significant relation between global health status/QoL and the use of the problem oriented coping behaviors. Elderly cancer patients were lower in functional domains of quality of life as physical, role, emotional and social domains but higher in cognitive domain.

### **VI. Recommendations**

On the basis of the current study findings, the following recommendations are suggested:  
 Developing programs that would help people to improve coping behavior strategy toward cancer,  
 Teaching elderly cancer patients how to use problem solving coping behavior rather than emotional coping behavior, providing teaching program about cancer to rural and illiterate persons. Recommendations for further research directions:  
 Development of educational programs for all nurses and other health care providers in hospitals and in elderly homes focusing on helping elderly cancer patients how to cope with cancer, Further researches should be carried out to find out the effectiveness of using coping strategies in reducing the stress levels and improving QoL among the elderly cancer patients.

**Table (1): Quality of life among the studied elderly:**

Quality of life domains	Mean ± SD (n=110)
Physical Functioning	9 ± 1.91
Role Functioning	3.65 ± 1.3
Emotional Functioning	2.79± 0.65
Cognitive Functioning	11.85 ± 2.78
Social Functioning	6.05 ± 0.91
Pain	2.33 ± 0.62
Nausea & vomiting	6.19 ± 0.80
Fatigue	4.25 ± 0.94
Dyspnea	2.46 ± 0.57
Insomnia	2.3 ± 0.52
Appetite loss	3.13 ± 0.39
Constipation	1.92 ± 0.62
Diarrhea	2.19 ± 0.61
Financial Functioning	3. 15 ± 0.57
Total QOL mean =	61.75 ± 9.16 42 – 94

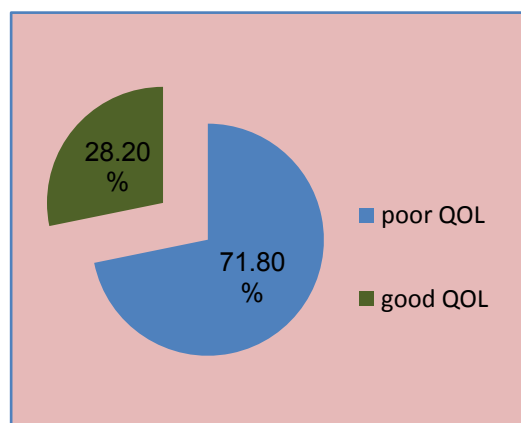


Figure (2) Classification of Quality of Life among the studied elderly

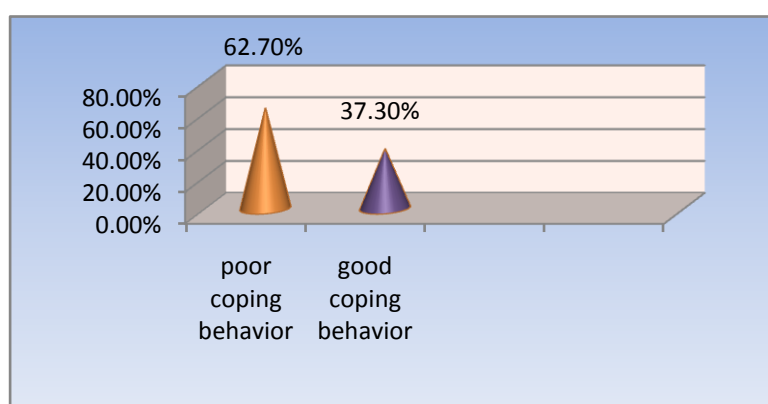
Table (2): Distribution of the studied elderly according to affective oriented coping behavior:

Affective coping behavior	(n=110)										Mean (SD)
	Never		Occasionally		Half time		Often		Always		
	N	%	N	%	N	%	N	%	N	%	
1-Hope that things will get better.	0	0	17	15.5	10	9.1	46	41.8	37	33.6	2.94 (1.03)
2-Smoke and chew gum.	24	21.8	69	62.7	12	10.9	2	1.8	3	2.7	1.01 (0.81)
3-Trust in God.	1	0.9	3	2.7	5	4.5	42	38.2	59	53.6	3.41 (0.78)
4-Get nervous.	3	2.7	83	75.5	22	20	2	1.8	0	0	1.21 (0.51)
5- Worry.	9	8.2	76	69.1	24	21.8	1	0.9	0	0	1.15 (0.56)
6-Want to be alone.	62	56.4	39	35.5	6	5.5	2	1.8	1	0.9	0.55 (0.76)
7-Laugh it off ,imagine that things could be worth	87	79.1	18	16.4	4	3.6	0	0	1	0.9	0.27 (0.62)
8-Try to put the problem out of your mind.	53	48.2	35	31.8	14	12.7	8	7.3	0	0	0.79 (0.93)
9-Day dream fantasizes.	68	61.8	24	21.8	13	11.8	4	3.6	1	0.9	0.6 (0.90)
10-Get prepared to expect the worse.	48	43.6	34	30.9	21	19.1	6	5.5	1	0.9	0.89 (0.96)
11-Get mad, curse; swear.	68	61.8	33	30	7	6.4	1	0.9	1	0.9	0.50 (0.74)
12-Cry, get depressed.	17	15.5	72	65.5	17	15.5	3	2.7	1	0.9	1.08 (.071)
13-Go to sleep, things will look better in the morning.	13	11.8	69	62.7	22	20	6	5.5	0	0	1.19 (0.71)
14-Don't worry about it; everything will probably work out fine.	31	28.2	54	49.1	23	20.9	2	1.8	0	0	0.96 (0.75)
15-Work off tension with physical activity.	76	69.1	30	27.3	4	3.6	0	0	0	0	0.35 (0.55)
16-Take out your tension on someone or something else.	52	47.3	48	43.6	8	7.3	1	0.9	1	0.9	0.65 (0.74)
17-Drink alcoholic beverages.	110	100	0	0	0	0	0	0	0	0	0 (0)
18-Resign yourself to the situation because things look hopeless.	37	33.6	53	48.2	17	15.5	3	2.7	0	0	0.87 (0.77)
19-Donothing in the hope that the problem will take care of itself.	26	23.6	55	50	22	20	7	6.4	0	0	1.09 (0.83)
20-Resign yourself to the situation because it's your fate.	3	2.7	19	17.3	65	59.1	20	18.2	3	2.7	2.01 (0.76)
21-Blame someone else for your problem.	81	73.6	21	19.1	8	7.3	0	0	0	0	0.34 (0.61)
22-Meditation, yoga, biofeedback.	78	70.9	20	18.2	10	9.1	2	1.8	0	0	0.41 (0.73)
23-Take drugs.	2	1.8	1	0.9	7	6.4	70	63.6	30	27.3	3.14 (0.67)
24-Seek comfort or help from family or friends.	0	0	7	6.4	63	57.3	35	31.8	5	4.5	2.35 (0.67)
25-Think in positive events in your life.	1	0.9	26	23.6	56	50.9	21	19.1	6	5.5	2.05(0.83)



**Table (3): Distribution of the studied elderly according to problem oriented coping behavior of the studied elderly:**

Problem oriented coping behavior	(n=110)										Mean (SD)
	Never		Occasionally		Half time		Often		Always		
	N	%	N	%	N	%	N	%	N	%	
1-Try to maintain some control over the situation.	68	61.8	24	21.8	12	10.9	5	4.5	1	0.9	0.61 (0.92)
2-Find out more about the situation so you can handle it better.	81	73.6	23	20.9	6	5.5	0	0	0	0	1.32 (0.57)
3-Think through different ways to handle the situation.	82	74.5	22	20	6	5.5	0	0	0	0	1.31 (0.57)
4-Look at the problem objectively.	64	58.2	15	13.6	24	21.8	7	6.4	0	0	0.76 (1)
5-Try out different ways of solving the problem to see which works the best.	7	6.4	75	68.2	16	14.5	10	9.1	2	1.8	1.32 (0.80)
6-Draw on past experience to help you handle the situation.	6	5.5	79	71.8	22	20	3	2.7	0	0	2.2 (0.57)
7-Try to find meaning in the situation.	54	49.1	44	40	10	9.1	2	1.8	0	0	0.64 (0.73)
8-Break the problem down into smaller pieces.	41	37.3	49	44.5	7	6.4	2	1.8	1	0.9	0.85 (0.81)
9-Set specific goals to help solve the problem.	15	13.6	64	58.2	27	24.5	3	2.7	1	0.9	1.19 (0.74)
10-Accept the situation as it is.	70	63.6	27	24.5	6	5.5	3	2.7	4	3.6	0.58 (0.98)
11-Talk the problem over with someone who has been in the same type of situation.	17	15.5	53	48.2	23	20.9	11	10	6	5.5	1.42 (1.04)
12-Actively try to change the situation.	68	61.8	28	25.5	13	11.8	0	0	1	0.9	0.53 (0.77)
13-Settle for the next best thing.	66	60	25	22.7	16	14.5	3	2.7	0	0	0.60 (0.84)
14-Do anything just to do something.	63	57.3	24	21.8	14	12.7	7	6.4	2	1.8	0.74 (1.03)
15-Let someone solve the problem	6	5.5	64	58.2	28	25.5	8	7.3	4	3.6	1.45 (0.85)



**Figure (2) Total coping behavior among the studied elderly**

**Table (4): Correlation between Total QOL and elderly characteristics:**

Variable	Total QOL (n=110)	
	R	P
Age (years)	0.39	<0.001**
Duration (months)	0.66	<0.001**
Global health status	-0.48	<0.001**
Self-assessment of QOL	-0.51	<0.001**
Problem oriented coping behavior	-0.34	0.04*
Affective oriented coping behavior	-0.31	0.04*

(\*\*) Statistically significant at p<0.01

(\*) statistically significant at p≤0.05

**Table (5): Correlation between Affective oriented coping behavior and elderly characteristics:**

Variable	Affective oriented coping behavior(n=110)	
	R	P
Age (years)	-0.41	<0.001**
Duration of diseases (months)	-0.38	<0.001**
Global health status	0.42	<0.001**
Self-assessment of QOL	0.52	<0.001**
Problem oriented coping behavior	0.39	<0.001**
Total QOL	-0.31	0.04*

(\*\*) Statistically significant at p<0.01

(\*) statistically significant at p≤0.05

**Table (6): Correlation between Problems oriented coping behavior and elderly characteristics:**

Variable	Problem oriented coping behavior (n=110)	
	R	P
Age (years)	-0.43	<0.001**
Duration of diseases (months)	-0.52	<0.001**
Global health status	0.51	<0.001**
Self-assessment of QOL	0.41	<0.001**
Affective oriented coping behavior	0.39	<0.001**
Total QOL	-0.34	0.04*

(\*\*) Statistically significant at p<0.01

(\*) statistically significant at p≤0.05

### References

- [1] Flatt T. (2012). A New Definition of Aging. *journalfrontiersin*; (148):P.P: doi: 10.3389/fgene.2012.00148.
- [2] Scott, A. M.; Wolchok, J. D.; Old, L. J.(2012).*Nature Rev. Cancer* 2012, 12(3), 278-287.
- [3] Osann K, Hsieh S, Nelson EL, Monk BJ, Chase D, Cella D et al (2014). Factors associated with poor quality of life among cervical cancer survivors: implications for clinical care and clinical trials. *GynecolOncol* 135(2):266–272.
- [4] Pirri C, Bayliss E, Trotter J, Olver IN, Katris P, Drummond P et al (2013). Nausea still the poor relation in antiemetic therapy? The impact on cancer patients' quality of life and psychological adjustment of nausea, vomiting and appetite loss, individually and concurrently as part of a symptom cluster. *Support Care Cancer* 21(3):735–748.
- [5] Barcaccia, B., Esposito, G. Matarese, M., Bertolaso, M., Elvira, M., and De Marinis ,M. G. (2013). Defining Quality of Life: A wildGooseChase?. *Europe s Journal of Psychology*,9(1):185-203.
- [6] Mitrousi, S. (2013). Theoretical Approaches to coping . *International Journal of Caring Science* ; 6(2):131-132.
- [7] Bolotova,AK and Hachaturova,MR.(2013). The role of time perspective in coping behavior, National Research University Higher School of Economics, Moscow. *Psychology in Russia: State of the Art* Volume 6, Issue 3, 2013.
- [8] Kate M. O'Rourke, (2015). Managing Elderly Cancer Patients: Quality of Life, Polypharmacy, and Survivorship.*Medscape* Nov 24,2015.
- [9] Wildiers H, Heeren P, Puts M, et al (2014). International Society of Geriatric Oncology consensus on geriatric assessment in older patients with cancer. *J ClinOncol*. 2014;32:2595-2603.
- [10] The World Health Organization's website,(2016). Cancer statistics.[online]. March 14[cited 2016 July 20] Retrieved fromhttp://www.cancer.gov/about cancer/understanding/statistics.
- [11] The National Cancer Registry Program of Egypt NCRPE, (2012): Reports and Statistics: Aswan, Damietta & El-Minia. [online].September 5[cited 2016 september10]Retrieved from<http://www.cancerregistry.gov.eg/reports.aspx

- [12] National Cancer Institute Egypt, (2013): Cancer Statistics.[Online].September 3[cited 2016 August13] Retrieved from: [http:// www Nci.edu.eg/Statistics.aspx](http://www.Nci.edu.eg/Statistics.aspx).
- [13] Ibrahim.A.S, Khaled.H.M, Mikhail.N.NH, Baraka.H,andKamel.H. (2014). Cancer Incidence in Egypt; from article; Results of the National Population-Based Cancer Registry Program; Published 21 September 2014.
- [14] Abd El Meguid A, (2000). Stressors and coping patterns of mothers of mentally handicapped children. published Master Thesis, Faculty of Nursing, University of Alexandria.
- [15] Fadila DE, (2007). Coping behaviors of elderly patients with Chronic Obstructive Pulmonary Disease .published Master Thesis,Faculty of Nursing University of Alexandria.
- [16] Jalowiec A and Power M. (1981). Stressors and coping in hypertensive and emergency room patients. *Nurs Res*; 30(1):10\_15.
- [17] The European Organization for Research and Treatment of Cancer (EORTC) Quality of life, (2013). EORTC QLQ – C30. [Online]. 2013September 6 [cited 2016 July 30] Retrieved from: [http:// groups.eortc.be/qol/eortc-qlq-c30](http://groups.eortc.be/qol/eortc-qlq-c30).
- [18] DeSantis CE, Lin CC, Mariotto AB, Siegel RL, Stein KD, Kramer JL, et al.(2014). Cancer treatment and survivorship statistics, 2014. *CA Cancer J Clin*. 2014;64:252–71.
- [19] Smith RA, Manassaram-Baptiste D, Brooks D, Cokkinides V, Doroshenko M, Saslow D, et al.(2014). Cancer screening in the united states,2014: a review of current American cancer society guidelines and current issues in cancer screening. *CA Cancer J Clin*. 2014;64:30–51.
- [20] V Swaminathan and RA Audisio.(2012). Cancer in older patients: an analysis of elderly oncology. *E cancer medical science*.2012; 6: 243.
- [21] Li Q, Lin Y, Qiu Y, Gao B, Xu Y, (2014). The assessment of health-related quality of life and related factors in Chinese elderly patients undergoing chemotherapy for advanced cancer: a cross-sectional study.
- [22] Akyol,M, Ulger,E, Alacacioglu,A, Kucukzeybek,Y, Bayoglu,V, Yildiz,Y, Yildiz,I, Salman,T, Varol,U, Demir,L, Dirican,A, Gumus,Z, Tarhan,M,O,(2015). Quality of life in colorectal cancer patients: anIzmir Oncology Group (IZOG) study. Department of Medical Oncology, Izmir KatipCelebi University, Ataturk Training and Research Hospital, Izmir; Institute of Oncology, DokuzEylul University, Izmir, Turkey.
- [23] Pape-Zambito D, Jiang Z, Wu H, et al.(2014). Identifying a highly-aggressive DCIS subgroup by studying intra-individual DCIS heterogeneity among invasive breast cancer patients. *PLoS One*. 2014;9.
- [24] Andrade,F,P, Muniz,R,M, Lange,C, Schwartz,E, EchevarriaGuani,M,E.(2013). ECONOMIC AND SOCIO-DEMOGRAPHIC PROFILE OF CANCER SURVIVORS ACCORDING TO DEGREE OF RESILIENCE' Profile of cancer survivors attended in an oncology service in Pelotas (RS) according todegree of resilience, presented to the Faculty of Nursing of the Federal University of Pelotas (UFPel),in 2011, 2013 Abr-Jun; 22(2): 476-84.
- [25] Puri, M Ashat, A Pandey, NK Goel, A Singh, V Kaushal.(2014) Socio-demographic characteristics of cancer patients: Hospital based cancer registry in a tertiary care hospital of India. Government Medical College and Hospital Sec 32, Chandigarh, India 2014 | Volume : 51 | Issue : 1 | Page : 1-4.
- [26] Omran,S, Khader,Y, McMillan,S.(2017). Symptom Clusters and Quality of Life in Hospice Patients with Cancer. *Asian Pacific Journal of Cancer Prevention*, Vol 18.
- [27] Karabulutlu,E,Y (2014). Coping with stress of family caregivers of cancer patients in Turkey*Asia Pac J OncolNurs*. 2014 Apr-Jun; 1(1): 55–60.
- [28] Al-Sharbatil,S, Muttappallymyalil,J, SreedharanJ,J, Almosawy,Y. (2017). Predictors of Colorectal Cancer Knowledge among Adults in the United Arab Emirates.*Asian Pacific Journal of Cancer Prevention*, Vol 18 DOI:10.22034/APJCP.2017.18.9.2355.
- [29] Esbensen,B,A, Thomsen,T. (2011). Quality of life and hope in elderly people with cancer. *Open Journal of Nursing*, 2011, 1, 26-32.
- [30] Geogakopoulos A, Kontodimopoulos N, Chatziioannou S and Niakas D. (2013). EORTC QLQ-C30 and FACT-LYM for the assessment of health-related quality of life of newly diagnosed lymphoma patients undergoing chemotherapy, *European Journal of Oncology Nursing*; 17: 849-855.
- [31] Schlosser T,C,M and Ceolim M,F. (2012). Quality of life of cancer patients during the chemotherapy period. *Text Context Nursing*, Florianopolis, 2012Jul-Sep;21(3):600-7.
- [32] Luciano J. Pereira, Juunior Braga Caputo, Paula Midori Castelo, Silva Marques, Saul Martins de Paiva. (2015). Oral physiology and quality of life in cancer patients. *Nutr Hosp*. 2015;(5):2161-2166.
- [33] Li X, Song X1, Chen Z, Li M, Lu L, Xu Y, Zhan W, He Y, Xu K.(2014). Quality of life in rectal cancer patients after radical surgery: a survey of Chinese patients. *World J SurgOncol*. 2014 May 22;12:161.
- [34] Saad,M,T. (2015). Coping behavior and health related quality of life of elderly patients suffering from cancer. Faculty of nursing Mansoura University,2015.
- [35] Chen HM, Huang MF, Yeh YC, Huang WH, Chen CS. (2014). Effectiveness of coping strategies intervention on caregiver burden among caregivers of elderly patients with dementia the *official journal of the Japanese psychogeriatric society* First published: 17 December 2014.
- [36] Maleknia,N and FarhadKahrzei,F.(2015). The Relationship between Stress Coping Styles and Quality of Life among Patients with Breast Cancer. *Journal of midwifery & reproductive health*.Accepted: 16-Agu-2015.
- [37] JOVIĆ,M, VULIĆ-PRTORIĆ,A, BARABAN,D, GRUBIĆ,M. (2013). Coping strategies and health-related quality of life in children and adolescents with type 1 diabetes. *Review of Psychology*, Vol. 16, No. 1, 29-36.
- [38] Rezaei,L and Salehi,S.(2016).The Relationship between Self-Esteem and Coping Styles in Patients Undergoing Hemodialysis. *International Journal of Medical Research & Health Sciences*, 2016, 5, 7S:1-6.
- [39] Thweib N. (2013). Quality of Life of Palestinian Cancer Patients. *J PediatrHematolOncol*, 33:S68-S69.
- [40] Santos,P,R and Amauri,R,T. (2010). Correlation between coping style and quality of life among hemodialysis patients from a low-income area in Brazil. 17 May 2010.
- [41] Shakeri,J,Kamangar,E, Ebrahimi,E,Aznab,M, Shakeri,H, and Arman,F. (2015). Association of Coping Styles with Quality of Life in Cancer Patients. *Indian J Palliat Care*. 2015 Sep-Dec; 21(3): 298–304.
- [42] Craciuna B. (2013). Coping Strategies, Self-Criticism and Gender Factor in Relation to Quality of Life. *Procedia - Social and Behavioral Sciences* 78 (2013) 466 – 470.
- [43] Szramka-Pawlak ,A. Dańczak-Pazdrowska,T. Rzepa,A. Szewczyk,A. Sadowska-Przytocka &R. Żaba.(2013). Health-related quality of life, optimism, and coping strategies in persons suffering from localized scleroderma. *Journal Psychology, Health & Medicine* Volume 18, 2013 - Issue 6. Pages 654-663 | Received 08 Aug 2012, Accepted 01 Jan 2013, Published online: 11 Feb 2013.