Original Article

Relationship between Psychological Resilience and Depression among elderly Cancer Patients with pain

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1.ABSTRACT

Psychological resilience is a relatively new construct in geriatrics field that allows older adults to improve the ability to adapt positively and has an important role in recovery from adversity and better physical and mental health in elderly patient with cancer **Aim:** Assess the level of psychological resilience and depression among elderly cancer patients with pain. **Method** A descriptive correlational research design was used. A purposive sample of 351elderly cancer patients selected from Oncology center Mansoura University. **Results:** the mean age of the studied elderly patients was 65.61 ± 5.70 years. 74,4% of the studied elders reported low level of resilience . 43,0% of the studied elders did not suffer from depression while 22,5% had mild depression. A highly significant statistical relation between psychological resilience levels and gender, level of education ,residence and living status (P=0.01**, 0.000**,0.00.0** and 0.03* respectively). There was high statistical significant relation between depression levels and age, gender, income, level of education and residence (P=0.005**, P=0.002**, P=0.000**,P=0.000**and P=0.003** respectively).

Conclusion: A highly significant negative relation between psychological resilience and depression in which level of depression decrease with increase in psychological resilience. Also, there was high significant correlation between income and depression

 Recommendations: Designing psycho- educational programs for elderly cancer patients to enhance their psychological resilience, Psychological counseling for elderly patients with cancer to improve their coping strategies to pain, Planning educational programs for nurses on psychological needs of elderly cancer patients, encouraging elderly patients to engage in new activities and make new friendships, designing plans for activities that build resilience, such as joining a social group, developing a family communication plan, starting a stress management program and exercising
Keywords: depression ,psychological resilience ,cancer ,elderly

2.Introduction:

Cancer risk increase in elderly patients due to primarily aging changes in the immune system which affect the ability of the immune system to differentiate between the invaders and normal tissues. Immune cells begin to attack normal body tissues which increase the risk for many types of cancers in addition to the life style with high caloric diet, stress, low physical activity and exposure to pollutions **(Castelo-Branco& Soveral, 2014).** In Egypt, the only published incidence rates of cancer in elderly patients from a cancer registry in one district in Nile delta (Gharbiah governorate). The published crude and age-standardized incidence rates from that registry up to 2007 are 96.5and132.6/100,000 males and 97.3 and 122.1/100,000 females **(Hirko etal., 2013).** As cancer is predominantly a disease of elderly persons, many older people with cancer experience chronic and persistent pain. One of the studies found that over 80%ofelderly patients with advanced cancer reported daily pain. Within the hospice setting, over 40% of elderly patients reported severe pain. Cancer pain has been associated with depression among elderly patients in institutional and outpatient settings **(Solviketal., 2020).**

Depression is a common in elderly patients with cancer, the prevalence of depression currently ranges from 3 to 31%. These depressive symptoms are more common in hospitalized elderly patients with advanced cancer who have greater disability or physical distress. Psychological distress contributes to the worsening of suffering, quality of life and shortened survival. Attention to depressive symptoms is clinically important because both psychological and

pharmacological interventions have been shown to be effective in the treatment of symptoms that meet criteria for the diagnosis of major depressive disorder (Krebber etal., 2014). cancers 11.2% in women (De Martel etal., 2012).

For elderly patients with cancer, hope is regarded as one of the most important and effective coping style with cancer treatment and its pain. Resilience has been defined as the dynamic capacity of individuals to successfully maintain or regain their mental health in the face of significant life adversities or risks. Resilience might depend on several factors including positive emotions, cognitive flexibility such as acceptance, active coping style and spirituality (Southwick & Charney, 2012). Psychological resilience is a relatively new construct in geriatrics field that allows older adults to improve the ability to adapt positively and has an important role in recovery from adversity and better physical and mental health in elderly patient with cancer (Hassani etal., 2017).

2.1 Significance of the study:

Cancer is categorized as the third cause of death among elderly patients. Based on the report released by WHO, and International Cancer Research Institute in the year 2012, approximately 14 million new cases were seen in the whole world, while the number will be expected to rise to 22 million within the next 20yearsleading to an increase in the global cancer burden. As a consequence of growing and ageing population, an important part of this increase is predicted to concern developing countries. The most frequently seen cancer types in population over 70 years are lung cancer 22.5% and prostate cancer 18.8% in men, and breast cancer 12.8%andcolorectal cancers 11.2% in women (De Martel etal., 2012). Therefore, assesing the level of psychological resilience and depression among elderly cancer patients with pain measuring the relationship between resilience and depression among elderly cancer patients with pain are very important.

2.2 Aim of the study

Assess the level of psychological resilience and depression among elderly cancer patient with pain.

2.3. Research Question

1-What is the level of psychological resilience and depression among elderly cancer patients with pain?

2-Is there a relationship between psychological resilience and depression among elderly cancer patients with pain?

3.Subjects and Method

3.1 Study Design

A descriptive research design was used to carry out this study.

3.2 study Setting:

This study was carried out at inpatient and outpatient clinics of Oncology Center Mansoura University

3.3 Subjects:

A purposive sample of (351) elderly cancer patients aged 60 years and above, attended the above mentioned setting was selected according to the following criteria:

inclusion criteria:

1. Both sexes aged 60 years and above.

2. Ability to communicate.

3. Willing to participate in the study Have normal cognitive function (score 24 or more) and able to communicate

4-diagnosedwith any type of cancer not less than three months

5- complain from pain.

3.4 Tools of data collection

Tool I: Demographic and Clinical Structured Interview Sheet: It will be developed by the researcher after review of relevant literature and divided into two parts: **Part I:**Demographic characteristics such as age, gender, marital status, income and level of education **Part II:** Clinical data such as diagnosis, tumor stage, type of treatment, past surgical history and pain characteristic (site, type, duration and severity).

Tool II: The Mini Mental State Examination (MMSE) Scale: This scale was developed by **Folstein & McHugh (1975)** . This tool was used for selection of the study subject. it's originally designed to assess the cognitive function of older adults. It was translated into Arabic language and validated by **Elokl (2002)**. The scale included five categories of cognitive function namely orientation, registration, attention, calculation, recall and language. The cognitive function are measured and scored according to the individual's actual answer. They were categorized into three levels of cognitive impairment. The scale total score is 30 grades classified as: score from 24 to 30 is assigned for those who have normal cognitive function, score from 18 to 23 is assigned for those who have mild cognitive impairment and score from zero to17 is assigned for those who have severe cognitive impairment

Tool III: The Numeric Rating Scale (NRS): Numeric Rating Scale is a commonly used tool validated by (Farrar, Troxel, Stott, Duncombe & Jensen, 2008). It was used to asses the level of pain on a scale from 0to 10, with 0 indicating no pain and 10 reflecting the worst possible pain NRS are often conducted as a scale from 1 to 10 which does not give the patient a solution to indicate no pain at all in which no pain(0), mild pain(1-3),moderate pain(4-6), sever pain(7-10).

Tool IV: Conor-Davidson Resilience Scale (CD RISC-10) its abrief scale was developed by two researchers – Campbell-Sills and Stein (2007) at the University of California, San Diego, based on factor analysis. It is extracted from of the original 25items (CD RISC-25-scale) that assess the capacity of the patient to face adversities and overcome obstacles encountered during their life with five answer categories(0-4)grouped in 4 factors, the first factor is tenacity which reflects the notion of personal competence, the second factor was adaptability- tolerance that has to do with tolerance of the negative effect and strengthening when facing stress. The third factor, support reflects a positive acceptance of changes and safe relations .The fourth factor, intuition reflects the control and confidence in one's instinct.. Total points possible rangefrom0-40 . Possible responses range from; not true at all (0), rarly true (1), sometimes true(2), often true (3), true nearly all the time (4). The higher score reflects high resilience.

Tool V: The Geriatric Depression Scale:(Short form-15). This tool was developed by Sheikh & Yesavage (1986). It is originally designed to assess the presence of depression and general wellbeing of the elderly. The scale includes fifteen questions. For ten (10) questions, a positive answer indicates the presence of depression and negative answer for the remaining five questions also indicates depression. When the response to a question is yes a score of one is allotted and when the response to a question is no a score of zero s allotted

3.5- Method

1. The director of Mansoura University's Oncology Center received an official letter from the Faculty of Nursing at Mansoura University

2. The appropriate authorities gave their official consent to conduct the study. The director of the oncology center was informed about study' goal and data collection time.   3. Tool I ((Demographic and Clinical Data Structured interview sheet), II (The Mini Mental state examination (MMSE)), III (The numeric rating scale (NRS) , IV (Conor-Davidson Resilience scale (CD RISC-10-),Tool V (The Geriatric Depression Scale)(Short form-15) were created by the researcher after reviewing the relevant literature. 4.Five jury members in the fields of gerontological nursing evaluated the study tools I, II, III, IV and V for content-related validity. Suggestions of the jury members were followed and the modification were done accordingly.

5.Reliability of the tool IV(Conor-Davidson Resilience Scale) was tested and found to be high with a Cronbach's alpha value of 96,0.

6. Informed written consent was obtained from the study subjects.

7. A pilot study was created on 10% of the participants from oncology center Mansoura University to ascertain the clarity of the tools.

8. Each patient was interviewed individually at each department in oncology center Mansoura University to collect the necessary data.

9. Each patient spent between 15 and 20 minutes filling out the study tools.

10. The data collection covered the period of 6 months from January to June 2022

3.6- Statistical analysis

The collected data were organized, tabulated and statistically analyzed using SPSS software (Statistical Package for the Social Sciences, version 25, SPSS Inc. Chicago, IL, USA). The normality assumption was accepted. Therefore categorical variables were represented as frequency and percentage. Continuous variables were represented as mean, and standard deviation. Independent t-test was used to test the difference between two means of continuous variables. ANOVA test was used to test the difference between more two means of continuous variables. Pearson correlation coefficient test was conducted to test the association between two continuous variables. Chi-square test was conducted to test the association between two categorical variables. Multiple linear regression analysis was performed to explore independent variable (demographics and resilience) of depression (dependent variable). Statistically significant was considered as (p-value ≤ 0.05 &0.01).

4. Result

Table (1) showed that the age of the studied elderly patients with cancer ranged from 60 years and above , with a mean age of 65.61 ± 5.70 years. Females were more prevalent in the studied elders. They constituted 60.4% of the patients with cancer. Illiteracy was prevailing among 24,7% of the studied elderly patients. As regards to residence, 73,3.% were residing in rural areas and 26.6% in urban areas.

Table (2) showed that 55,7% of the studied elderly patients had positive medical history . Regarding to the previous admission to the Oncology center, 79,1% of the studied patients have not been admitted to Oncology center before. As for previous surgeries, 69.6% of the studied subjects never had previous surgery. As for the type of cancer, 34,5% of the studied elderly patients had leukemia. According to the duration of cancer disease, 65,2% of the studied elderly patients had cancer from one to three months. As regards for treatment type, it was observed that 69,0% of the studied elderly patients were undergoing chemotherapy.

Table (3) showed that 53,2% had moderate level of pain, 29,4% had severe level of pain while,17,4% had mild level of pain.

Table (4) showed that there was a highly significant statistical relation between psychological resilience levels and gender, level of education , residence and living status(P=0.01**, 0.000**,0.00.0**,0.03* respectively). Also, there was high statistical relation between psychological resilience level and living status.

Table (5) It was observed that there was high statistical significant relation between depression levels and age, gender, income, level of education and residence (P=0.005**, P=0.002**, P=0.000**,P=0.000**and P=0.003** respectively).

Table (6) showed that there was highly significant negative relation between psychological resilience and depression (P=0.000**) in which level of depression decrease with increase in psychological resilience.

Table (7) showed that there was a high significant correlation between income and depression (P= 0.002**). Also, there was high significant correlation between resilience and depression (P= 0.000**).

Table (1): Demographic characteristics of the studied elderly cancer patients   (n=316)

Characteristics	N	%
Age years		
▪ 60-65	208	65.8
▪ >65	108	34.2
Mean±SD	65.61±5.70	
Gender		
▪ Male	125	39.6
▪ Female	191	60.4
Marital status		
▪ Single	3	0.9
▪ Married	212	67.1
▪ Divorced	22	7.0
▪ Widowed	79	25.0
Income		
▪ Enough	219	69.3
▪ Not enough	97	30.7
Level of education		
▪ Illiterate	78	24.7
▪ Read and write	74	23.4
▪ Primary and preparatory school	20	6.3
▪ Secondary school	97	30.7
▪ University education	47	14.8
Residence		
▪ Rural	232	73.4
▪ Urban	84	26.6
Living status		
▪ Family	197	62.3
▪ with children	88	27.8
▪ Alone	31	9,8

Table (2) Medical history of the studied elderly cancer patients (n=316)

Medical history	N	%
▪ Positive medical history	176	55.7
Diseases #		
▪ Hypertension	121	38.3
▪ Diabetes mellitus	101	32.0
▪ Orthopedic diseases	30	9.5
▪ Cardiovascular disease	30	9.5
▪ Other diseases	42	13,3
Previous admission		
▪ Yes	66	20.9
▪ No	250	79.1
Number of admission (n=66)		

	N	%
▪ 1-3	49	15.5
▪ > 3	17	5.4
Reason of admission #		
▪ Anemia	33	10.4
▪ Taking chemotherapy doses	10	3.2
▪ Hysterectomy	5	1.6
Surgery	N	%
▪ Yes	95	30.1
▪ No	221	69.9
Type of cancer #	N	%
▪ Leukemia	109	34.5
▪ Orthopedic cancer	34	10.8
▪ Liver cancer	27	8.5
▪ Stomach and colon cancer	55	17.4
▪ Breast cancer	56	17.7
▪ Uterine cancer	10	3.2
▪ Lung Cancer	7	2.2
▪ Pancreas cancer	3	0.9
▪ Ovarian cancer	1	0.3
▪ Lymph nodes cancer	10	3.2
▪ Other types of caner	4	0.12
Duration of cancer		
▪ <1 month	90	28.5
▪ 1-3 month	206	65.2
▪ >3 month	20	6.3
Stage of cancer		
▪ Early stage	214	67.7
▪ End stage	102	32.3
Treatment type		
▪ Radio therapy	13	4.1
▪ Chemotherapy	218	69.0
▪ Radiotherapy and chemotherapy	58	18.4
▪ Surgical treatment	21	6.6
▪ Surgical and chemotherapy treatment	6	1.9

#More than one answer was given

Table (3) Pain among studied elderly cancer patients (n=316)

Levels of pain	N	%
▪ Mild	55	17.4
▪ Moderate	188	53.2
▪ Severe	93	29.4

Table (4) : Relationship between psychological resilience levels and demographic characteristics of the studied elderly patients with cancer (n=316)

| Characteristics | Levels of psychological resilience | | | | | | χ^2 / p-value |
| | Low (<50%) | | Moderate (50%-75%) | | High (>75%) | | |
	N	%	N	%	N	%	
Over all		74.4		21.5		4.1	
Age years	150	72.1	46	22.1	12	5.8	4.56 / 0.10
▪ >65	85	78.7	22	20.4	1	0.9	
Gender							
▪ Male	90	72.0	34	27.2	1	0.8	8.77/0.01**
▪ Female	145	75.9	34	17.8	12	6.3	
Marital status							
▪ Single	2	66.7	1	33.3	0	0.0	6.32 /0.39
▪ Married	154	72.6	46	21.7	12	5.7	
▪ Divorced	15	68.2	7	31.8	0	0.0	
▪ Widowed	64	81.0	14	17.7	1	1.3	
Income							
▪ Enough	157	71.7	51	23.3	11	5.0	3.15/0.21
▪ Not enough	78	80.4	17	17.5	2	2.1	
Level of education							
▪ Illiterate	68	87.2	10	12.8	0	0.0	56.42/0.000**
▪ Read and write	62	83.8	11	14.9	1	1.4	
▪ Primary and preparatory school	14	70.0	6	30.0	0	0.0	
▪ Secondary school	66	68.0	29	29.9	2	2.1	
▪ University education	20	51.3	10	25.6	9	23.1	
▪ Post graduate studies	5	62.5	2	25.0	1	12.5	
Residence							
▪ Rural	187	80.6	41	17.7	4	1.7	22.68/0.000**
▪ Urban	48	57.1	27	32.1	9	10.7	
Living status							
▪ Alone	23	74.2	8	25.8	0	0.0	10.60/0.03*
▪ With family	137	69.5	48	24.4	12	6.1	
▪ With children	75	85.2	12	13.6	1	1.1	

*Statistically significant (p ≤0.05) / ** highly statistically significant (p ≤0.01)

Table (5): Relationship between depression levels and demographic characteristics of the studied elderly patients with cancer (n=316)

| Characteristics | Levels of depression | | | | | | | | χ^2 / p-value |
| | Normal | | Mild | | Moderate | | Severe | | |
	N	%	N	%	N	%	N	%	
Over all	136	430	71	22.5	64	20.3	45	14.5	12.92 / 0.005**
Age years	97	46.6	49	23.6	30	14.4	32	15.4	
▪ >65	39	36.1	22	20.4	34	31.5	13	12.0	
Gender									
▪ Male	64	51.2	13	12.8	31	24.8	14	11.2	15.26 /

▪ Female	72	37.7	55	28.8	33	17.3	31	16.2	0.002**
Marital status									
▪ Single	2	66.7	2	0.0	1	33.3	0	0.0	
▪ Married	94	44.3	47	22.2	41	19.3	30	14.2	9.69/ 0.38
▪ Divorced	7	31.8	2	9.1	8	36.4	5	22.7	
▪ Widowed	33	41.8	22	27.8	14	17.7	10	12.7	
Income									
▪ Enough	111	50.7	46	21.0	36	16.4	26	11.9	18.31/
▪ Not enough	25	25.8	25	25.8	28	28.9	19	19.6	0.000**
Level of education									
▪ Illiterate	23	29.5	25	32.1	16	20.5	14	17.9	
▪ Read and write	26	35.1	9	12.2	29	39.2	10	13.5	42.51/
▪ Primary and preparatory school	10	50.0	6	30.0	1	5.0	3	15.0	0.000**
▪ Secondary school	50	51.5	19	19.6	17	17.5	11	11.3	
▪ University education	21	53.8	11	28.2	1	2.6	6	15.1	
▪ Post graduate studies	6	75.0	1	12.5	0	0.0	1	12.5	
Residence									
▪ Rural	96	41.4	53	22.8	57	24.6	26	11.2	14.28/0.003**
▪ Urban	40	47.6	18	21.4	7	8.3	19	22.6	
Living status									
▪ Alone	11	35.5	9	29.0	5	16.1	6	19.4	
▪ With family	96	48.7	41	20.8	33	16.8	27	13.7	10.72/0.09
▪ With children	29	33.0	21	23.9	26	29.5	12	13.6	

** highly statistically significant (p ≤0.01)

Table (6) Relationship between psychological resilience levels and depression levels among elderly cancer patients (n=316)

Levels of depression	Total	Levels of psychological resilience						χ^2 / p-value
		Low (<50%)		Moderate (50%-75%)		High (>75%)		
		N	%	N	%	N	%	
● Normal	136	82	60.3	48	35.3	6	4.4	
● Mild depression	71	60	84.5	10	14.1	1	1.4	43.22/0.000**
● Moderate depression	64	60	93.8	4	6.3	0	0.0	
● Severe depression	45	33	73.3	6	13.3	6	13.3	

** Highly statistically significant (p ≤0.01)

Table (7): Factors contributing depression among elderly patients with cancer (n=316)

Coefficients[a]					
	Unstandardized Coefficients		Standardized Coefficients	T	P
	B	Std. Error	Beta		
Income	1.49	0.48	0.17	3.13	0.002**
Education	-0.26	0.15	-0.09	-1.66	0.098
Resilience	-0.18	0.03	-0.27	-4.95	0.000**
R / R^2 / Adjusted R / F/ P	0.40 / 0.16/ 0.15/ 19.90/ 0.000**				
a. Dependent Variable: DEPRESSION					

** Highly statistically significant (p ≤0.01)

5. Discussion

Cancer can be considered an age-related disease because the incidence of most cancers increases with age. The risk of cancer in older adults aged 60 years or older is expected to rise significantly over the next decade, over two thirds of all new cancers are diagnosed among adults aged ≥60 years **(Bhatt, 2019)**. Cancer pain has negative effects on life such as, decrease in physical performance, decrease in pain tolerance, potential decrease in life expectation, psychological threats such as feeling seclusion, loss of self-confidence, changes in social roles and depression **(Boyd, McNabney& Brandt, 2012)**. Psychological resilience is a relatively new construct in geriatrics field that allows older adults to improve the ability to adapt positively and has an important role in recovery from adversity and better physical and mental health in elderly patient with cancer **(Hassani etal., 2017)**.

The demographic background of the present study showed that, age of the studied elderly patients was 60 years and older. This result may attributed to the already normal age of elderly. This result is in accordance with a study done in Iran by **(Ladaninejad, Ilali, Mousavinasab & Taraghi, 2019)**. Another study was done in Istanbul by **(Cinar & Tas, 2015)** revealed that the majority of the studied patients aged 70 years and older. The result of this study showed that majority of the studied patients were females. This result may attributed to Some cancers only affect women because they develop in a woman's reproductive system, which includes the uterus, fallopian tubes, ovaries, cervix, vagina. In contrast, a study done in China by**(Xia, Dong, Cao, Sun, He, ... & Chen, 2022)** revealed that majority of the study patients were males due to smoking and alcohol consumption

Regarding the income , the present study showed that the majority of the study patients had enough income That income enabled them to make screening test and seeking for medical health facilities. This result is in accordance with a study done in

America by**(Steiling, Loui, Asokan, Nims, Moreira, Reb ello, & Suzuki,2020)**. According to the level of education,, the studied patients were illiterate. This result is in accordance with a study done in Asia by**(Rota, Alicandro, Pelucchi, Bonzi, Bertuccio, Hu & La Vecchia, ,2020)**. In a contrast, a study done in America by**(Dong, & Qin ,2020)** revealed that a higher education level may be associated with an increased risk of developing breast cancer.

Regarding the medial history, the majority of the studied patients had positive medical history of several diseases especially hypertension , diabetes and cardiovascular diseases. This result is attributed to weakness in the immune system and normal physiological changes due to aging. This result is in accordance with the study done in Espain by **(Bonilla-Sierra, Vargas-Martínez, Davalos-Batallas, Leon-Larios, & Lomas-Campos,2020)** and in America by **(Song, An & Zou, 2020)**. This study showed that the majority of the studied patients had leukemia, breast cancer for female. This result is in accordance with a study done in Iran by **(Khanali, & Kolahi, 2021)**that revealed that the most incident cancers is breast and colorectal.

Regarding the relationship between psychological resilience and depression among elderly cancer patients, this study showed that there was highly significant negative relation between psychological resilience and depression in which level of depression decrease with increase in psychological resilience. Meanwhile, psychological resilience has proved to be a significant protective factor for and depression. This result is in accordance with a study done in China by **(Hu, Xiao, Peng, Kuang, & He, 2018)** and with a study done by **(Solano, da Silva, Soares,2016)** and a study by**(Tamura,Suzaki,Ito&Fukawa,2021)**. Also in accordance with a study by**(Matzka, Mayer, Köck-Hódi, Moses-Passini, Dubey, Jahn, & Eicher 2016)**.

Regarding the relationship between psychological resilience and depression

among elderly cancer patients, this study showed that there was highly significant negative relation between psychological resilience and depression in which level of depression decrease with increase in psychological resilience. Meanwhile, psychological resilience has proved to be a significant protective factor for and depression. This result is in accordance with a study done in China by (Hu, Xiao, Peng, Kuang, & He, 2018) and with a study done by (Solano, da Silva, Soares, Ashmawi & Vieira, ,2016) and with a study done by(Tamura,Suzaki,Ito&Fukawa,2021). Also in accordance with a study by(Matzka, Mayer, Köck-Hódi, Moses-Passini, Dubey, Jahn, & Eicher,2016).

Regarding factors contributing depression, this present study showed that income affect depression in a positive way ,while income increase, depression level decrease. This result was attributed to enough income help in facing life demands and patients needs.This result is in accordance with a study done in America by (Solmi, , Koyanagi, Thompson, Fornaro, Correll, & Veronese, 2020). This study showed that Education had strong negative relation with depression. It may because education improve quality of life. This result is in accordance with a study done by (Nyandra, Kartiko, Susanto, Supriyati, & Suryasa,2018)

6. Conclusion

Based on results of present study, a highly significant negative relation between psychological resilience and depression in which level of depression decrease with increase in psychological resilience. Also, there was high significant correlation between income and depression.

7.. Recommendations

1- Designing psycho- educational programs for elderly cancer patients to enhance their psychological resilience.

2- Psychological counseling for elderly patients with cancer to improve their coping strategies to pain

3-Planning educational programs for nurses on psychological needs of elderly cancer

patients 4-Encouraging elderly patients to participate in new activities and make new relatinships. 5- Drawing plans for activities that increase resilience, such as engaging in a social group, designing a family communication strategy, starting a stress control program and exercising .

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