Clinical and Experimental Health Sciences

Pain and Malnutrition in Elderly Cancer Patients: Examples of Southern Turkey

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ABSTRACT

Objective: The prevalence of geriatric cancer disease is gradually increasing. Both the cancer diagnosis and many accompanying symptoms affect individuals bio-psycho-socially and impair the quality of life. This study was conducted to evaluate pain and nutritional status in geriatric cancer patients.

Methods: This descriptive study was conducted with geriatric cancer patients receiving treatment in the ambulatory chemotherapy outpatient clinic of a university and oncology hospital. The population of the study consisted of cancer patients receiving treatment in the hospital and the sample consisted of 215 geriatric cancer patients who were voluntary to participate in the study. The data of the study were collected using a questionnaire, the Visual Analog Scale (VAS), and the Mini Nutritional Assessment.

Results: The mean age of the patients was 69.3±4.7 years. Respiratory tract cancers ranked first (28.8%). 42.8% of the patients were at stage four and they frequently experienced symptoms such as fatigue, loss of appetite and poor nutrition. VAS mean score was 4.8±2.8, Mini nutritional assessment mean score was 9.2±3.0, and there was a negative significant correlation between the VAS and Mini nutritional assessment mean scores ($p<0.001$).

Conclusion: It was determined that geriatric cancer patients experienced “moderate” pain, had a risk for malnutrition and as their pain levels increased, the risk for malnutrition increased.

Keywords: Geriatric Nursing, Cancer Pain, Nutrition Assesment

1. INTRODUCTION

Today the downward trend in the population growth rate and the increase of average life expectancy, have led to an increase rate in the elderly population within the general population and have caused our world to gradually enter a demographic ageing process. Thus, old age has remained on the agenda in both developed and developing countries and is becoming more and more important every passing day. As is known, chronic illnesses increase along with the increase of elderly population and average life expectancy in the world and in Turkey (1,2). Among the chronic diseases, 50% of cancer cases are encountered in people over 65 years of age, and cancers are in the second place among the causes of death in people over 65 years of age, after heart diseases. (3). Both the cancer diagnosis and many accompanying symptoms affect individuals bio-psycho-socially and impair the quality of life. Among the symptoms affecting patients negatively, “pain” comes first. Pain in cancer patients may impair their quality of life, lead to despair and prevent them from coping with the disease (2,4). Therefore, the treatment and management of symptoms related to cancer become more important (5). Pain in geriatric cancer patients also appears as an important problem. The pain prevalence has been reported to be 28% in patients who have recently been diagnosed with cancer, 50-70% in patients receiving cancer treatment actively, and 64-80% in patients with advanced cancer (5). Pain in cancer is encountered at the rate of 50% in the early period and diagnosis of disease and at the rate of 75-80% in the advancing periods of disease. In the literature it is indicated that cancer pain significantly affects patients’ quality of life and becomes a greater source of fear than the death itself for patients and relatives in more than 70% of advanced cancer cases (6). However, the first step of pain control is pain assessment. This assessment should be made by a multidisciplinary health care team. Playing a key role in this team, nurses are an important and supplementary element of cancer care.

What makes nurses more important and distinctive in pain control than other team members is that they spend more time with the patient than other team members (7).

One of the factors affecting cancer patients negatively in many aspects is their nutritional status. Weight loss is the first

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sign of an impaired nutrition and is frequently observed in geriatric patients (8). It has been reported that malnutrition is encountered in 40-80% of these patients during diagnosis (9), the malnutrition prevalence ranges from 25% to 70% (10-13) and this rate rises up to 83% in geriatric cancer patients (14).

Thus, early evaluation and rapid intervention of nutritional status are of prime importance to prevent morbidity and mortality in this patient group (9). As is known, cancer patients intensely experience symptoms related to treatments such as anorexia, cachexia, taste changes, pain and malnutrition, besides symptoms caused by the disease process (15-17). Especially pain may prevent nutrition and lead to poor nutrition and malnutrition (18). Pain and malnutrition in elderly cancer patients should be routinely evaluated by nurses with appropriate assessment tools specific to the elderly individual, and pharmacological and non-pharmacological methods should be used in treatment (3). Therefore, this study was conducted to evaluate pain and nutritional status in geriatric cancer patients and contribute to the management of pain and nutritional problems.

2. METHODS

2.1. Design and Sample

This descriptive study was conducted with geriatric cancer patients receiving treatment in the ambulatory chemotherapy outpatient clinic of a university hospital and in an oncology hospital. The results of a previous study were used to calculate the sample size of the study (5,18). Necessary minimum sample size was calculated to be 215 with α=0.05 and the test power of (1-β) 0.80.

Prior to starting the study, a mini mental test was applied to the individuals and the patients who obtained 24 points and above, were over the age of 65 years, were diagnosed with cancer, could communicate, and were voluntary to participate in the study, were included in the study. However, the patients who got less than 24 points from the mini mental test, were under the age of 65 years, and refused to participate in the study, were not included in the study.

2.2. Data Collection Process

The data of the study were collected using a questionnaire, the Visual Analog Scale (VAS) and Mini Nutritional Assessment Questionnaire-Short Form (MNA).

Visual Analog Scale: The scale is applied by marking on a straight line with a pen. On this line, the point of 0 cm indicates no pain and the point of 10 cm indicates worst pain. In the literature, it is stated that VAS is a reliable tool to be used in evaluating the pain level (19).

Mini Nutritional Assessment Questionnaire-Short Form (MNA): This form is used in identifying malnutrition in both clinic and outpatient clinic patients and evaluating the outcomes of nutritional support treatments. It is accepted to be a valid measurement tool not only for revealing malnutrition in geriatric patients, but also for predetermining the risk for malnutrition. Also the European Society for Clinical Nutrition and Metabolism recommends this measurement tool particularly for the elderly (20,21). Turkish validity study of this form was conducted by Sarıkaya (2013). In the form, 0-7 points indicate “malnutrition”, 8-11 points indicate “risk for malnutrition”, and 12-14 points indicate “normal nutritional status” (22).

2.3. Procedure

The researchers applied the questionnaires to the patients who agreed to participate in the study via the face-to-face interview method in the clinic setting.

It took approximately ten minutes to apply the questionnaires. None of the patients wanted to leave the study or refused to answer the questions in the questionnaire.

2.4. Data Assessment

Statistical analyzes were reported using the SPSS 22.0 statistical software. The descriptive statistics were indicated via median and standard deviation values. In addition, the Student’s t-Test, Kruskal-Wallis, Mann-Whitney U Test, and Spearman’s correlation analysis were used. The value of $p<0.05$ was accepted to be statistically significant.

2.5. Ethical Considerations

Before starting the study, informed consent form and necessary permissions from the ethics committee and the institution were obtained from the patients.The study approval was obtained from Gaziantep University Clinical Trials Ethics Committee (approval number: 2017/163)

3. RESULTS

Two hundred fifteen patients completed the study. It was determined that the mean age of the geriatric cancer patients was 69.35±4.74 years. Of the patients, 43.3% were female, 44.2% were primary school graduate, 90.2% were married, 40.5% were unemployed, and 74.9% had a middle economic situation. In addition, When gender was evaluated with VAS mean scores; the women felt more pain than men and the difference between them was statistically significant ($p<0.05$). The mean VAS score of geriatric cancer patients was 4.8±2.8, and the mean score of mini nutritional assessment was 9.2±3.0. However, the patients, who were university graduate, married, freelancer and had a good, had higher MNA mean scores ($p>0.05$) (Table 1).

Table 1. *Comparison of Socio-demographic characteristics and pain and mini nutritional assessment mean scores of the patients*

Characteristics	n (%)	VAS Mean±SD	MNA Mean±SD
Gender			
Female	93 (43.3)	5.51±2.7	9.40±3.04
Male	122 (56.7)	4.33±2.80	9.21±3.14
p		**0.002**[a]	0.673[a]
Educational Background			
Illiterate	62 (28.8)	5.12±2.76	9.22±3.17
Literate	26 (12.1)	5.11±2.83	8.30±2.51
Primary Education	95 (44.2)	4.87±3.05	9.26±3.27
High School	27 (12.6)	3.96±2.2	10.33±2.80
University	5 (2.3)	4.20±0.83	10.40±1.34
p		0.373[b]	0.129[b]
Marital Status			
Married	194 (90.2)	4.73±2.80	9.41±3.14
Single	21 (9.8)	5.90±2.89	8.23±2.50
p		0.072[c]	0.054[c]
Occupation			
Worker	12 (5.6)	4.16±2.94	10.16±3.71
Civil Servant	7 (3.3)	3.57±1.61	10.28±1.25
Freelancer	30 (14.0)	4.30±3.16	10.33±3.00
Unemployed	87 (40.5)	5.54±2.88	8.91±3.18
Other	79 (36.7)	4.50±2.56	9.10±2.98
p		**0.036**[b]	0.105[b]
Economic Situation			
High	9 (4.2)	3.33±1.73	10.77±2.2
Middle	161 (74.9)	4.78±2.80	9.59±3.02
Low	45 (20.9)	5.37±2.97	7.95±3.16
p		0.111[b]	0.005[b]
Residence Place			
District	90 (41.9)	4.62±2.55	9.01±2.85
Province	125 (58.1)	5.00±3.00	9.50±3.25
p		0.254[a]	0.138[a]
Total	**215 (100.0)**	**4.8±2.8**	**9.2±3.0**

[a]: : Independent sample t test [b]:Kruskal-Wallis test c: Mann Whitney U

Of the patients who participated in the study, 28.8% suffered from respiratory tract cancer, 42.8% were at stage four, 60.9% underwent chemotherapy, 61.9% had metastasis, 18.6% had another cancer patient in family, and 34.4% had comorbidities. When comparing some characteristics of the patients and VAS mean scores, it was determined that there was a significant difference between the disease stage, presence of metastasis and VAS mean scores ($p<0.05$). There was no statistically significant difference between MNA mean scores and disease stage. However, as the disease stage advanced, the MNA mean score decreased ($p>0.05$) (Table 2).

Table 2. *Comparison of some characteristics and pain and mini nutritional assessment mean scores of the patients*

Characteristics	n(%)	VAS Mean±SD	MNA Mean±SD
Cancer Type			
Respiratory Tract	62 (28.8)	4.4±3.07	9.58±3.26
Digestive System	61 (28.4)	4.72±2.75	8.60±3.25
Reproductive System	35 (16.3)	5.71±2.35	9.31±2.68
Urinary System	9 (4.2)	5.00±2.00	8.11±3.33
Lymphoma	23 (10.7)	4.60±3.08	10.04±3.22
Breast	25 (11.6)	5.12±2.90	10.00±2.38
p		0.372[a]	0.170[a]
Duration of Disease (Month)			
1-12	104 (48.4)	4.57±2.94	9.06±3.13
13-24	39 (18.1)	5.48±2.55	9.30±3.37
25-36	37 (17.2)	5.21±2.86	9.18±2.90
37 months and above	35 (16.3)	4.54±2.66	10.08±2.85
p		0.226[a]	0.504[a]
Stage			
1	27 (12.6)	3.33±2.63	10.07±2.38
2	56 (26.0)	4.41±2.77	9.67±3.31
3	40 (18.6)	5.25±2.62	9.60±3.16
4	92 (42.8)	5.38±2.83	8.70±3.05
p		**0.002**[a]	0.099[a]
Treatment Type			
Chemotherapy (CT)	131 (60.9)	5.06±2.87	9.58±3.15
Radiotherapy (RT)	5 (2.3)	4.60±2.70	9.20±1.64
CT+RT	26 (12.1)	4.92±2.62	8.19±3.57
RT+Surgery	3 (1.4)	7.33±2.88	8.33±4.04
CT+Surgery	29 (13.5)	3.82±2.66	9.00±2.97
CT+RT+Surgery	21 (9.8)	4.47±2.80	9.42±2.27
p		0.224[a]	0.494[a]
Metastasis			
Available	133 (61.9)	5.33±2.75	8.94±3.10
N/A	82 (38.1)	4.06±2.77	9.86±3.01
p		**0.001**[b]	0.034[b]
Cancer Patient in Family			
Available	40 (18.6)	4.90±2.98	9.45±3.70
N/A	175 (81.4)	4.83±2.79	9.26±2.95
p		0.895[b]	0.767[b]
Comorbidities			
Available	73 (34.0)	5.06±2.83	9.78±2.97
N/A	142 (66.0)	4.73±2.82	8.96±3.14
p		0.410[b]	0.122[b]
Total	**215 (100.0)**		

[a]: Kruskal-Wallis test [b]: Independent sample t test

In this study, 33.9% had pain in the abdominal area, 47.4% experienced pain for 6-11 months, 25.6% had a condition triggering pain, 77.2% had pain at intervals, 36.7% had tingling pain, 45.1% took medications to decrease the pain, and 36.7% took nonopioid analgesics. When comparing the pain-related characteristics and VAS mean scores of the patients, it was found that the patients, who had pain in the waist-back area, described 'constant' and 'stabbing' pain

as pain frequency and took strong opioids, had higher VAS mean scores (p<0.05). It was determined that the patients, who had pain in the extremity and abdominal area, had experienced pain for a year or more and took strong opioids, had lower MNA mean scores (p<0.05) (Table 3).

Table 3. *Comparison of pain-related characteristics and pain and mini nutritional assessment mean scores of the patients*

Characteristics	n(%)	VAS Mean±SD	MNA Mean±SD
Area of Pain			
Chest	25 (11.6)	5.48±2.46	9.40±3.29
Waist-Back	49 (22.8)	5.87±2.54	9.22±2.60
Extremities	28 (13.0)	5.14±2.67	8.64±3.49
Abdomen	74 (33.9)	5.67±2.19	8.78±3.05
No Specific Area	39 (18.1)	1.35±1.73	10.7±2.99
p		**0.000**[a]	**0.011**[a]
Duration of Pain (Month)			
0-5	102 (20.0)	5.36±2.51	9.27±3.11
6-11	31 (47.4)	5.61±2.40	8.77±2.88
12 months and above	39 (14.4)	6.43±2.03	8.38±3.04
Constant	43 (18.1)	1.62±1.87	10.55±2.93
p		**0.000** [a]	**0.008** [a]
Frequency of Pain			
Constant	49 (22.8)	7.63±2.11	7.67±2.80
Intermittent	166 (77.2)	4.02±2.46	9.77±3.02
p		**0.000**[b]	**0.000**[b]
Type of Pain			
Throbbing	20 (9.3)	4.70±2.02	9.10±3.43
Tingling	79 (36.7)	5.67±2.60	9.46±2.64
Stabbing	55 (25.6)	5.98±229	8.25±3.43
Burning	22 (10.2)	5.31±2.14	8.90±2.75
Undescribable	39 (18.1)	1.38±1.78	10.74±2.94
p		**0.000**[a]	**0.005**[a]
Situations Decreasing Pain			
Taking Medications	97 (45.1)	6.29±2.29	9.02±3.04
Changing Position	4 (1.9)	6.50±2.51	9.00±2.70
Resting	48 (22.3)	5.29±2.14	7.95±2.91
N/A	66 (30.7)	2.28±2.18	10.69±2.83
p		**0.000** [a]	**0.000** [a]
Situations Increasing Pain			
Cold Weather	5 (42.8)	7.20±2.38	9.40±2.88
Moving	63 (2.3)	6.46±2.22	8.39±2.91
Stress	28 (13.0)	5.92±2.03	8.89±3.28
Going to the Toilet	9 (4.2)	4.66±1.50	10.00±2.69
Eating	18 (8.4)	5.77±2.53	8.22±3.07
N/A	92 (42.8)	3.11±2.61	10.17±3.02
p		**0.000** [a]	**0.004** [a]
Medications Taken for Pain			
Nonopioids	79 (36.7)	4.03±1.78	9.89±2.99
Weak Opioids	25 (11.6)	6.00±1.84	8.60±2.84
Strong Opioids	66 (30.7)	7.60±1.75	7.89±3.07
N/A	45 (20.9)	1.57±1.57	10.68±2.56
p		**0.000** [a]	**0.000** [a]

[a]: *Kruskal-Wallis test* , [b]: *Independent sample t test*

Of the patients, 90.7% had fatigue, 71.6% had loss of appetite, 60.5% were sufferring from poor nutrition, 47.4% had nausea-vomiting, and 58.6% had sleeplessness. It was determined that the patients who had loss of appetite, nausea-vomiting, malnutrition, poor personal care and sleeplessness, had higher VAS mean scores and lower MNA mean scores. This difference was statistically significant in all situations except for fatigue (p<0.05). The geriatric cancer patients describing pain also experienced many other symptoms (Table 4).

Table 4. *Comparison of some symptoms and pain and mini nutritional assessment mean scores of the patients*

Problems	n(%)	VAS Mean±SD	MNA Mean±SD
Fatigue			
Available	195(90.7)	5.01±2.79	9.21±3.14
N/A	20(9.3)	3.20±2.60	10.10±2.46
p		0.008[a]	0.216[a]
Loss of Appetite			
Available	154(71.6)	5.46±2.54	8.63±2.95
N/A	61 (28.4)	3.29±2.90	10.96±2.82
p		**0.000**[b]	**0.000**[b]
Nausea-Vomiting			
Available	102(47.4)	5.75±2.83	8.26±3.05
N/A	113(52.6)	4.02±2.56	10.23±2.84
p		**0.000**[b]	**0.000**[b]
Poor Nutrition			
Available	130(60.5)	5.46±2.69	8.66±2.90
N/A	85 (39.5)	3.90±2.78	10.27±3.15
p		0.000[b]	0.000[b]
Poor Personal Care			
Available	65(30.2)	6.32±2.64	8.06±3.14
N/A	150(69.8)	4.20±2.66	9.83±2.92
p		**0.000**[b]	**0.000**[b]
Negative Effect on Quality of Life			
Yes	125(58.1)	5.43±2.63	8.69±3.08
No	90(41.9)	4.03±2.89	10.13±2.93
p		**0.000**[b]	**0.000**[b]
Sleeplessness			
Available	126(58.6)	5.98±2.48	8.76±3.23
N/A	89(41.4)	3.23±2.48	10.05±2.73
p		0.000[b]	0.002[b]
Desire to Cry			
Available	69(32.1)	6.23±2.49	8.18±3.16
N/A	146(67.9)	4.19±2.74	9.82±2.93
p		**0.000**[b]	**0.000**[b]
Unwillingness to Talk			
Available	69(32.1)	6.78±2.02	8.27±2.94
N/A	146 (67.9)	3.93±2.69	9.78±3.06
p		**0.000**[b]	**0.001**[b]
Sense of Burnout			
Available	73(34)	6.21±2.42	8.17±3.08
N/A	142(66)	4.14±2.76	9.87±2.95
p		**0.000**[b]	**0.000**[b]
Decrease in Relations with Other People Around (Such as Coworkers. Social Friends)			
Available	56(26)	6.50±2.13	8.03±3.34
N/A	159(74)	4.26±2.81	9.74±2.88
p		**0.000**[b]	**0.001**[b]

[a]: *Mann Whitney U,* [b]: *Independent sample t test*

The patients' VAS mean score was 4.84±2.82, which was stated as "moderate" and MNA mean score was 9.29±3.09, which was stated as "risk for malnutrition". It was determined that there was a negative correlation between VAS mean score and MNA mean score (p<0.01) (Table 5).

Table 5. *Correlation between the pain and mini nutritional assessment mean scores of the patients*

	r MNA p
VAS	-.327 0.000[a]

a: Spearman correlatıon Coefficient

4.DISCUSSION

The population of elderly patients is growing with increasing prevalence of cancer diagnoses and cancerrelated pain syndromes. Cancer pain occur at any time in the disease's progression. It is a multidimensional and complex phenomenon that need proper assessment, management and evaluation based on current nursing knowledge and practices (24). Playing a key role in this team, nurses are an important and supplementary element of cancer care (5).

Also, they have important duties and responsibilities in determining the risk for malnutrition and improving the nutritional status (25). Accordingly, this study aimed to assesment the pain and nutritional status of geriatric cancer patients.

As geriatric patients had more complex health issues than young patients, serious difficulties are faced in evaluating and managing pain in geriatric cancer patients. Despite present treatments, geriatric patients are unable to receive adequate treatment for cancer pain (26) and at least 42% of patients complain about pain that cannot be treated as required (27). In a study comprising a nursing home for people over the age of 65 years, it was stated that as age advanced, the opportunity for patients not to receive adequate treatment increased and more than one quarter of these patients took no analgesic agents especially over the age of 85 years or in case of decreased cognitive functions (28). In the study conducted by Kutluturkan et al., with 106 geriatric cancer patients, the most frequent symptoms experienced by the patients were reported to be weakness (83%), dryness of the mouth (71.7%) and pain (62.3%) (29).

In a cohort study with 292 patients, the prevalence of pain in geriatric cancer patients was found to be 65% (30). In this study, it was determined that the patients' VAS mean score was 4.84±2.82 and the most frequent symptoms they experienced were fatigue (90.7%), loss of appetite (71.6%), and malnutrition (60.5%), respectively.

Malnutrition is a clinical condition that is not regarded much by most clinicians and does not receive attention for treatment when identified. However, it is common especially among the geriatric population and has a proven effect on the morbidity and mortality of patients (31). Uncontrollable malnutrition may worsen the tolerance of treatment, including a greater possibility for relapse or death during or after the treatment and prevent the completion of treatment (32). Its prevalence might be 23-62% for the elderly in the hospital environment and rise up to 85% for the patients in nursing homes (31).

In a study conducted in Turkey it was determined that 28% of the patients applying to geriatric outpatient clinic had a poor nutritional status, 69% of hospitalized patients had a risk for malnutrition, and 12% had a malnutrition rate (33,34).

In a study conducted in a nursing home, it was found that according to the MNA, 63% of the elderly had a risk for malnutrition and 9.6% had malnutrition (35). In another study, it was determined that the risk for malnutrition was 31% and rate of malnutrition was 13% in patients applying to outpatient clinic; whereas, the risk for malnutrition was 39% and rate of malnutrition was 25% among hospitalized patients (36). In the Turkish Nursing Homes Nutritional Status Evaluation Project conducted by the Academic Geriatrics Society, it was found that the risk for malnutrition was 38.3% and the malnutrition rate was 11.9% (37). These results indicated that malnutrition was frequently encountered in cancer patients. The severity of malnutrition varies according to the type, area and stage of cancer (17,38).

In their study, Hamaker et al., found that the malnutrition prevalence in geriatric cancer patients was 46% (30). In a review examining multiple studies, it was reported that malnutrition or risk for malnutrition in geriatric cancer patients ranged from 27% to 83% (39). In this study, it was determined that the patients' MNA mean score was 9.29±3.09 and 46.9% had a risk for malnutrition and 28.1% had malnutrition. In addition, the patients had problems such as loss of appetite (71.6%), malnutrition (60.5%) and nausea-vomiting (47.4%). As is known, loss of appetite may lead to weight loss, malnutrition, morbidity and mortality in geriatric patients. In their study, Kutluturkan et al., determined that the severest symptom experienced by geriatric cancer patients was loss of appetite (29).

Pain frequency varies according to the stage of disease, might be around 25-50% in early-stage patients and patients receiving active cancer treatment and rises up to 70-80% in metastatic patients (40).

In this study, it was determined that advanced staged cancer patients, patients feeling constantly pain and metastatic patients had higher VAS mean scores and lower MNA mean scores.

Thus, it is thought that nurses giving care to advanced stage cancer patients should begin to evaluate patients' pain as from the early period, follow their nutrition and weight with a multidisciplinary team approach and support them before malnutrition develops. In the studies it has been reported that geriatric patients experience fatigue more often due to cancer and reasons not related to cancer (41,42). Especially untreated cancer may cause fatigue and reduce or cease physical, social, interpersonal and recreational activities, prevent household, family, work and educational

performance and affect all living spaces such as psychosocial and spiritual well-being.

It may cause significant declines in productivity, self – esteem, physical functionality and quality of life and also pose a distress in sticking to treatment regimes. In addition, it may delay the treatment and cause a dose limitation or cessation of the treatment (3,42,43). Thus, it is of prime importance to define fatigue in the geriatric patient group very well and apply necessary nursing interventions. Also in this study, it was determined that the most frequent symptom experienced by geriatric cancer patients was fatigue and this symptom was accompanied by many other problems. Accordingly, it is of particular importance to evaluate fatigue and other related problems in geriatric patients regularly. As is known, cancer patients, no matter how old they are, typically experience multiple symptoms at the same time. Cancer itself, direct or indirect outcomes of cancer, early or late side effects of the treatment or comorbidities may cause these symptoms (44). In a study, it was reported that nearly one third of the elderly (31.2%) had pain, fatigue, sleeplessness and mood disorders at the same time (45).

In the cancer report published by the World Health Organization in 2020, it was reported that 20-50% of patients could show symptoms such as pain, fatigue and nutritional problems, have a difficulty in expressing their pain depending on fatigue, and geriatric patients could face a risk for malnutrition under the effect of symptoms such as nutritional difficulty and loss of appetite (32). In this study, it was determined that the patients most frequently experienced symptoms such as fatigue, loss of appetite, malnutrition and sleeplessness in addition to pain.

In the study, it was found that the patients taking strong opioids for analgesics, had the highest levels of pain and the lowest malnutrition mean scores. This showed that the patients still had pain and their nutritional problems continued despite taking strong opioids. In cancer patients malnutrition is a frequently encountered situation due to nausea-vomiting and loss of appetite, depending on the burdens caused by the disease and treatment.

In case of loss of appetite, symptoms such as changes in sense of taste, presence of nausea-vomiting, pain and depression should be questioned.

It is recommended that changes related to sense of taste can be controlled by adding a little salt and spice to the food. Removing any odor or view, increasing nausea-vomiting from the environment, before nutrition in order for nausea and vomiting not to affect nutrition is among possible interventions (46).

5. CONCLUSION

It was determined that geriatric cancer patients experienced “moderate” pain, had a risk for malnutrition and as their pain levels increased, the risk for malnutrition increased. The patients who had fatigue, loss of appetite, nausea-vomiting, malnutrition, poor personal care and sleeplessness, had higher VAS mean scores and lower MNA mean scores.

In addition, the pain experienced by the patients was accompanied by fatigue, loss of appetite, nausea-vomiting, malnutrition, poor personal care, sleeplessness, desire of crying and sense of burnout. In accordance with these results, it is recommended to evaluate geriatric cancer patients in terms of pain and malnutrition in the treatment process, take necessary precautions before their symptoms advance, follow other problems that may accompany pain and support patients.

The most important limitation of the study was that pain and nutritional status were evaluated only via a questionnaire and results are limited to the research group only.

Procurement of pain management and nutritional support is crucial for intended clinical outcomes in geriatric cancer patients. It is suggested to follow up pain and malnutrition of patients using appropriate assessment tools. Nurses at this point play a key role.

Thus pain, malnutrition and accompanying problems of patients should be managed with a multidisciplinary team approach.

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