

## Supportive Care Requirements of Elderly Patients with Cancer Refer to Seirei Mikatahara General Hospital in 2023

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### Abstract

Cancer can cause many problems in all family, economic, social, psychological, and physical dimensions for the elderly. The present research was conducted to examine the supportive care requirements of the elderly with cancer. In this descriptive-analytical study, a total of 248 elderly (144 men and 104 women) with an average age of  $67.17 \pm 6.94$  years with cancer were referred to Seirei Mikatahara General Hospital, Japan, using non-probability and available sampling in 2023. The data collection tool includes a reliable and valid supportive care requirements survey of cancer patients, which has five areas of daily functioning and physical needs of the health system and support information and care of sexual and mental patients. Based on the obtained results, a statistically significant relationship was reported between the physical areas and the daily performance of the sexual area of support and care and the information and health system with gender ( $P < 0.05$ ). Elderly women needed more help in daily and physical functioning and elderly men in the areas of support and care, sex, health system, and information. The conclusion of this study stated that the unmet needs of the elderly with cancer are high, especially in the physical and daily performance areas.

**Keywords:** Aging, Health care, Patient's needs, Cancer

### Introduction

The world's elderly population is increasing significantly, and the number of people aged 60 and over is expected to be more than 1.2 billion by 2050 [1]. This fact includes great challenges in the health field and socioeconomic issues of the elderly. Because in old age, we face physical problems and an increase in chronic diseases caused by aging. One of the chronic diseases whose risk increases significantly with age is cancer [2-4]. Despite the continuous trend of reducing the incidence of cancer, the number of elderly people with cancer will increase significantly in the coming years [3, 5], because about 60% of cancers happen in people 65 years or older [2]. Despite the progress in the treatment of cancer, the cancer prognosis is still poor. This disease causes many mental and physical disorders in patients, such as pain and social isolation, which affects their daily lives. Based on that, the need for supportive care increases [6-8]. The term care requirements are like an umbrella that includes the social, practical, emotional, informational, physical, and spiritual requirements of a person with cancer [9, 10]. Supportive care for a patient with cancer helps to cope with the disease during the process of determining, treatment, and post-treatment stages. Paying attention to the requirements of cancer patients makes the care of

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**Received:** 28 May 2023; **Revised:** 18 August 2023; **Accepted:** 19 August 2023

**How to Cite This Article:** Uneno Y, Morita T, Yukiko Watanabe Y, Kawashima N, Muto M. Supportive Care Requirements of Elderly Patients with Cancer Refer to Seirei Mikatahara General Hospital in 2023. *J Integr Nurs Palliat Care*. 2023;2(1):11-6.

these patients optimally take place, and on the other hand, not meeting the requirements can cause psychological problems for the patients and not only the progress of the disease but also the quality of their physical and mental life [11, 12]. Supportive requirements of cancer patients are very different in different phases of the disease. Recent advances in health care are prolonging the lives of patients and thus changing their support requirements [13].

Wang *et al.*'s systematic review of unmet care requirements in patients with advanced cancer and informal caregivers also confirmed that the frequency of unmet care requirements in the reviewed research is different from physical and psychological requirements and health care services and information. One of the most unmet requirements of the elderly is cancer [14, 15]. In addition, these requirements are not given enough attention in the treatment phase [16-18]. In medical environments, the unique supportive care requirements of each patient should be correctly identified and the clients should receive appropriate supportive services [19].

Assessing the requirements of cancer patients helps oncologists and care staff to focus on the specific problems of their patients, help the patient to solve them, and use specific interventions and protocols. Therefore, in oncology departments, it is necessary to take measures to evaluate the requirements of patients, and this work should be done through special questionnaires and clinical interviews and become routine work in these departments [20, 21] to identify and manage the requirements of cancer patients to provide better quality care and support services to this group of patients. Since there is no similar study in this field, this study was conducted to determine the supportive care needs of the elderly with cancer.

## Materials and Methods

This descriptive-analytical study was done on 248 elderly (144 men and 104 women) with an average age of  $67.17 \pm 6.94$  years with cancer referred to Seirei Mikatahara General Hospital, Japan, using non-probability and available sampling in 2023. The sample size was determined at a confidence level of 0.95 and a test power of 0.9, with a maximum error of 10% of the average [6].

In calculating the sample size, according to the average and standard deviation of unmet needs in different areas of this study, the criterion of action was the sexual area, which applied the largest sample size or considering the mean and standard deviation of the mentioned trait ( $49.39 \pm 28.01$ ), the sample size was calculated to be 247 people. In this study, 248 people were examined.

The criteria for entering the study included being at least 60 years old, having a definite diagnosis of cancer-based on pathological results and the confirmation of an oncologist, being in one of the stages of the beginning of the disease until the end of the treatment, and being alert enough to answer the questions. The criteria for not entering the study included suffering from a specific mental illness, taking psychoactive substances, and incompletely completing the questionnaire.

Sampling was done in a non-probability, easy, and accessible way. In this way, for 3.5 months, the researcher visited the outpatient and inpatient chemotherapy departments of one of the treatment centers of oncologists' offices, on different days of the week, alternately in the morning and the afternoon, until the sample size reached the determined number. The elderly who were referred to these centers for chemotherapy or radiation therapy were invited to participate in the research. At first, the aim of the study was explained to the patient's companion permission was obtained from the companion and the patient himself, and then the questionnaire was distributed. All ethical principles in research, such as the confidentiality of information, Informed consent of the patient and, if necessary, accompanied by the patient, and the right to withdraw from the study were respected.

Considering the condition of the elderly, the questions were read by the researcher for all the participants in the research. Information was collected by using the demographic and clinical profile registration form of the elderly with cancer, including age, sex, ethnicity, place of residence, literacy level, cancer type, cancer duration, and treatment stage. The questionnaire on supportive care needs of cancer patients (SCNS) with five areas and 24 questions taken from the Australian Institute of Psychology and Cancer Research was utilized to collect data [22], the aforementioned questionnaire was also previously used in studies used differently [6, 10, 23]. This tool includes physical needs and daily functioning (5 items, such as doing housework), psychological needs (10 items, such as worrying about the results of treatment), sexual needs (3 items, such as changes in sexual relationships), support and care needs (5 items, such as the timely presence of health workers when meeting physical needs), the needs of the health system and information (11 items, such as sufficient information about the side effects and benefits of treatments before starting each of them). The findings are reported as an average and the minimum score is 34 and the maximum score is 170. The answer to each item on a five-point Likert scale is "no need-not applicable", "I was satisfied with the help received", "low need", "moderate need" and "high need", and the score is 1-5, respectively. A higher score indicates a higher need. Scores in each dimension range from zero to 100. Cronbach's alpha coefficient was calculated for the whole tool as 0.88 and for the physical domain as 0.76, the psychological domain as 0.67, the sexual domain as 0.9, the support and concern as 0.87, and the health and information system as 0.88 [24]. The reliability of this questionnaire was determined by the retest-retest method and after studying 20 cancer patients ( $r=0.9$ ) [23].

Data were analyzed and interpreted by SPSS-16 software at a significance level of less than 0.05. Quantitative data were explained by mean and standard deviation, and qualitative data were explained by absolute and relative frequency. Because of the lack of normal distribution of quantitative data based on the Kolmogorov-Smirnov test, non-parametric tests such as Kruskal-Wallis and Mann-Whitney were used.

## Results and Discussion

The mean and standard deviation of the age of the elderly was  $67.17 \pm 6.94$  years with an age range of 60-90 years. 144 people (58.1%) were men and 104 people (41.9%) were women. 48 patients (19.4%) with cancer of the upper gastrointestinal tract, 47 patients (19%) with cancer of the lower gastrointestinal tract, 32 patients (12.9%) with breast cancer, 25 patients (1.10%) with leukemia, 21 patients (8.5%) prostate cancer, 19 patients (7.7%) lung cancer, 18 patients (7.3%) uterine and ovarian cancer, 13 patients (5.2%) head and neck cancer, and 25 patients (10.1%) were suffering from other cancers. 199 patients (80.2%) in the chemotherapy phase, 20 patients (8.1%) in the radiation therapy phase, and 29 patients (11.7%) in the simultaneous chemotherapy and radiotherapy phase were included in the study. The average and standard deviation of the duration of cancer was  $9.98 \pm 9.41$  months with a range of 1 to 48 months. Elderly people with cancer reported the highest need for assistance in the physical and daily functioning areas, and the least need for help in the sexual area (**Table 1**).

**Table 1.** Mean and standard deviation of supportive care needs of elderly with cancer.

Areas of supportive care needs	Mean $\pm$ Standard deviation
Physical and daily performance	72.52 $\pm$ 26.76
Health and information system	65.11 $\pm$ 19.62
Support and care	64.43 $\pm$ 17.85
Psychological	63.99 $\pm$ 25.50
Sexual	38.60 $\pm$ 35.55

**Table 2** shows the greatest need to receive help in various fields according to SCNS-SE questionnaires. The highest unmet need (2.76%) was about "finding out what you can do to help yourself get better." A statistically significant difference was found between the support and care needs of women and men in different areas except the mental area ( $p < 0.05$ ). In this way, elderly women needed more help in physical and daily functioning. While elderly men needed help in other areas. Also, the elderly in the age group of 60 to 74 years needed more help in the areas of health, sex, and information systems.

**Table 2.** The prevalence of supportive care requirements in the elderly with cancer.

Areas	Supportive care needs	Number (Percentage)
Health and information system	Find out what you can do to help yourself get better	189 (76.2)
	Finding out about your disease to what extent it is under control and recovering	154 (62.1)
Support and care	The attention of hospital personnel and showing sensitivity to feelings and emotional needs	172 (69.4)
	Timely presence of medical staff when meeting physical needs	164 (66.1)
Psychological	Confidence in the future	156 (62.9)
	Learning to control your emotions (caused by the disease situation)	147(59.3)
Physical and daily performance	Lack of energy/fatigue	131 (52.8)
	Not feeling well most of the time	127 (51.2)

There was no statistically significant relationship between the level of literacy and the scope of the support and care system ( $P = 0.4$ ). There was a statistically significant relationship between the two physical areas and daily performance and the health and information system or the place of residence of the elderly ( $p < 0.05$ ).

According to the results of the current study, the care needs of the elderly with cancer were determined in order of the greatest needs in the physical area and the daily functioning of the health and information system, support and care, psychological and sexual. Women with cancer reported the greatest need for help in physical and daily functioning, and men with cancer reported the greatest need for help in sex, support and care, and health and information systems.

The most common need for help in the elderly with cancer was the physical domain and daily functioning. In other studies, the greatest need to receive help was reported in the field of health and information systems [6, 25,

26]. The reason for this difference can be due to the difference in the groups studied in the research. In the mentioned studies, the target group of cancer patients were adults and non-elderly patients. The target group of the present study was the elderly with cancer. This difference in the greatest need can be caused by physiological problems and physical conditions of old age. Because with increasing age, physical strength decreases and elderly people experience changes in the functioning of all body systems, and cancer causes these problems to intensify. In the study by Tremblay *et al.* in Canada, the elderly with cancer reported the greatest need for supportive care regarding pain, nausea, and limitations in daily activities, which is similar to the present study, which was conducted on the elderly with cancer [27].

The elderly participants in the current study stated the greatest need for help in terms of lack of fatigue and energy. In the study of Nair *et al.*, which was conducted on adults with cancer in the United Arab Emirates; Lack of energy and fatigue is reported by 75%, which is higher than other cases in the physical field and daily performance [28]. This result is consistent with the current study. The reason for the need to receive more help may be related to the fatigue caused by aging in the elderly. Since aging causes changes in the biological system of the body and some physiological functions of the body; therefore, the present finding can be justified.

The elderly had the greatest need to receive help in the psychological field regarding gaining confidence about the future. In the study of Nair *et al.* on adults with cancer in the psychological field, gaining confidence about the future was reported as the most unmet need [28], which is consistent with the present study.

The current study reported the greatest need to receive help in the psychological field in the elderly with cancer who were illiterate. In the study by Cheah *et al.*, which was done on adults and elderly with prostate cancer in Malaysia; the literacy level was also significantly related to the psychological field, so patients with elementary literacy levels had a greater need to receive help in the psychological field [25]. Likely, the reason for the high need for mental help in the illiterate elderly is their lack of knowledge about the disease and the treatment stages and prognosis of the disease. The higher need to gain confidence about the future and maintain optimism about the future in this research can confirm this issue.

In the present study, the least need in the elderly with cancer was the sexual area. So in all three cases of this area, nearly half of the elderly did not need any help, which is consistent with the study of Pérez-Fortis *et al.* [29].

In the area of support and care, the elderly with cancer reported the highest need for help regarding the attention of hospital staff and showing sensitivity to feelings and emotional needs. Considering the special conditions of cancer and old age, it seems that the elderly expect more attention and compassion from the care staff. In the present study, a significant relationship between men and women was found in the field of support and care. So that elderly men reported the need to receive more help. Culturally, the dominant approach in society is that women take more responsibility for taking care of themselves.

In the present study, women reported less need to receive support. In the area of the health and information system, they did not need any help in receiving written information about the important aspects of self-care and controlling the complications of the disease in the elderly home. This finding is because 48% of the studied elderly were illiterate. In this area, 76% of the elderly reported the greatest need for help regarding finding out what they can do to get better, and 62% of the elderly reported the greatest need for help regarding the condition of the disease and recovery. It seems that not much attention is paid to the education of cancer patients and their families, and for this reason, patients are often faced with several questions about cancer, risk factors, and how to treat it.

In the present study, elderly people over 75 years of age reported the need to receive less help in the field of health and information systems. It seems that with increasing age, physical disabilities increase to such an extent that the announcement and request for help regarding the side effects of drugs, being treated in a well-equipped hospital, and access to counselors, and psychology are not very important for this group of patients. Therefore, health workers must make more efforts to assess needs.

One of the limitations of this study is the researcher's lack of access to research samples by cancer type and disease severity due to time constraints. It is suggested that supportive care requirements in a type of cancer, tumor grading, and other age groups should be done in future studies. The findings of the current study showed that the unmet needs of the elderly with cancer are high, especially in the functional and physical areas. This research can help to create supportive care services for the elderly with cancer to meet their needs, especially in the physical aspect and daily functioning. It is suggested that supportive care needs in a type of cancer be conducted in future studies. It is also suggested to examine supportive care needs in other age groups.

## Conclusion

The results of this study stated that the elderly with cancer have a high need for help in other areas of care-support needs, except for the sexual area, and the highest unmet need in this study was determined in the physical area and daily functioning. Regarding the attention of the hospital staff and finding out about the things they can do to help themselves, a high need for assistance was reported. Therefore, understanding the needs of the elderly with cancer can help them feel satisfied and enable the staff to prioritize the needs of the elderly with cancer and provide appropriate care and support consulting services for the patients.

**Acknowledgments:** None

**Conflict of Interest:** None

**Financial Support:** None

**Ethics Statement:** None

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