

Assessing the Supportive Care Needs of Elderly Cancer Patients at Seirei Mikatahara General Hospital in 2023

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Abstract

Cancer poses numerous challenges for the elderly and affects various aspects of their lives, including economic, family, psychological, social, and physical well-being. This study aimed to investigate the supportive care needs of the elderly with cancer. In this descriptive-analytical research, 248 elderly individuals (144 men and 104 women) with a mean age of 67.17 ± 6.94 years, who were diagnosed with cancer, were selected from the Seirei Mikatahara General Hospital, Japan, in 2023 using a non-probability and convenience method. Data were collected through a validated and reliable supportive care needs survey designed for cancer patients, which assesses five key domains: daily functioning, physical needs, health system support, sexual health, and mental health care. The results showed that there was a statistically significant relationship between gender and several supportive care domains, including physical functioning, daily performance, sexual health support, and health system information ($P < 0.05$). Elderly women needed more help in daily and physical functioning, while elderly men needed more support in the areas of care, sexual health, health system, and information. The study concluded that the unmet needs of elderly cancer patients are particularly high in the areas of physical and daily functioning.

Keywords: Aging, Patient needs, Health care, Cancer

Introduction

The global elderly population is growing rapidly, with projections indicating that the number of individuals aged 60 and above will surpass 1.2 billion by 2050 [1]. This demographic shift presents significant challenges in terms of healthcare and socioeconomic issues for the elderly. In old age, individuals often experience physical issues and an increase in chronic diseases, many of which

are exacerbated by aging. Cancer is one such chronic disease, with its risk significantly rising as people age. Despite a gradual decline in cancer incidence rates overall, the number of elderly individuals diagnosed with cancer is expected to increase dramatically in the coming years, as approximately 60% of cancers occur in those aged 65 and older [2].

Although advances in cancer treatment have been made, the prognosis for many cancer patients remains poor. The disease often leads to numerous physical and mental health challenges, such as pain and social isolation, which can severely impact the daily lives of patients. Consequently, the need for supportive care becomes more critical. The term “care requirements” encompasses a broad range of needs, including social, practical,

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emotional, informational, physical, and spiritual support for cancer patients [3-10].

Supportive care plays a crucial role in helping cancer patients manage their illness throughout the diagnosis, treatment, and post-treatment phases. Addressing the specific needs of cancer patients ensures optimal care while neglecting these needs can lead to psychological issues and a decline in both physical and mental quality of life, as well as hinder disease progress [11, 12]. The supportive care requirements of cancer patients vary significantly across different stages of the disease. With advancements in healthcare extending patients' lifespans, their supportive needs are also evolving [13].

Wang *et al.*'s systematic review on unmet care needs in patients with advanced cancer and their informal caregivers also highlighted that the prevalence of unmet needs varies between physical and psychological requirements, healthcare services, and information. Among the elderly, cancer-related needs are particularly unmet [14, 15]. Furthermore, these needs often lack sufficient attention during the treatment phase [16-18]. In clinical settings, it is crucial to identify the specific supportive care requirements of each patient to ensure they receive the appropriate care and services [19].

Assessing the needs of cancer patients enables oncologists and healthcare teams to focus on the particular challenges their patients face, helping them to address these issues with tailored interventions and treatment protocols. As a result, oncology departments must implement routine assessments of patient needs through specialized surveys and clinical interviews [20, 21]. This approach will help in better managing the needs of cancer patients and improving the quality of care and support services. Given the lack of research in this specific area, this study aims to investigate the supportive care needs of elderly individuals with cancer.

Materials and Methods

This descriptive-analytical study was carried out with 248 elderly participants (144 men and 104 women) diagnosed with cancer, with an average age of 67.17 ± 6.94 years, who were referred to Seirei Mikatahara General Hospital in Japan in 2023. The sampling method used was non-probability, convenience sampling. To calculate the sample size, a confidence level of 95% and a power of 90% were considered, with a margin of error of 10% of the mean value [6].

The sample size calculation focused on the sexual health area, which required the largest sample size based on its mean (49.39) and standard deviation (28.01). This calculation resulted in a required sample of 247 individuals, and the study included 248 participants.

Eligibility criteria for participation were: being at least 60 years old, having a confirmed cancer diagnosis through pathological results and oncologist verification, being in any stage from diagnosis to post-treatment, and being mentally alert enough to answer the survey questions. Exclusion criteria included individuals with mental illnesses, those using psychoactive drugs, or those who did not complete the survey.

Sampling was conducted in a convenient, non-probability manner. The researcher visited both outpatient and inpatient chemotherapy departments at an oncology center over 3.5 months, alternating between morning and afternoon shifts, until the target sample size was reached. Elderly individuals attending chemotherapy or radiation therapy were invited to participate. The purpose of the study was explained to the patient's companion, and consent was obtained from both the companion and the patient before the distribution of the questionnaires. Ethical standards were upheld, including confidentiality of participant information, obtaining informed consent, and ensuring the participants' right to withdraw from the study at any time.

Given the condition of elderly participants, the researcher personally read all the questions aloud to each individual in the study. Data were collected through a registration form documenting the demographic and clinical profiles of the elderly cancer patients, which included their age, gender, ethnicity, place of residence, education level, cancer type, cancer duration, and treatment stage. The Supportive Care Needs Survey (SCNS), developed by the Australian Institute of Psychology and Cancer Research, was used to assess supportive care needs. This tool consists of 24 items across five domains and has been previously employed in several studies [6, 10, 22, 23].

The five domains assessed by the SCNS are:

1. Physical needs and daily functioning (5 items, e.g., performing household tasks)
2. Psychological needs (10 items, e.g., concerns about the outcome of treatment)
3. Sexual needs (3 items, e.g., changes in sexual relationships)
4. Support and care needs (5 items, e.g., the availability of healthcare professionals when needed)

5. Health system needs and information (11 items, e.g., adequate information on treatment side effects and benefits before starting treatment)

Each question in the survey was rated on a five-point Likert scale, with responses ranging from “no need-not applicable” to “high need,” corresponding to scores of 1 to 5. The total score for the survey can range from 34 to 170, with higher scores indicating greater need. The score for each domain varies between 0 and 100. Cronbach's alpha was calculated for the entire tool, resulting in an overall value of 0.88. The alpha values for each domain were: physical (0.76), psychological (0.67), sexual (0.9), support and care (0.87), and health and information (0.88). The reliability of the survey was further confirmed through a test-retest method, where the correlation coefficient for 20 cancer patients was found to be 0.9 [23].

Data analysis was performed using SPSS version 16 software with a significance level set at 0.05. Descriptive statistics, including means and standard deviations, were used for continuous variables, while categorical data were expressed in terms of frequency and percentage. Due to the non-normal distribution of the quantitative data, as confirmed by the Kolmogorov-Smirnov test,

non-parametric tests, specifically the Kruskal-Wallis and Mann-Whitney tests, were employed for comparison.

Results and Discussion

The average age of the elderly participants was 67.17 ± 6.94 years, with ages ranging from 60 to 90 years. Among the 248 participants, 144 (58.1%) were male and 104 (41.9%) were female. In terms of cancer types, 48 patients (19.4%) had upper gastrointestinal cancers, 47 (19%) had lower gastrointestinal cancers, 32 (12.9%) had breast cancer, 25 (10.1%) had leukemia, 21 (8.5%) had prostate cancer, 19 (7.7%) had lung cancer, 18 (7.3%) had uterine and ovarian cancers, 13 (5.2%) had head and neck cancers, and 25 (10.1%) had various other cancers. Regarding the treatment phase, 199 patients (80.2%) were undergoing chemotherapy, 20 (8.1%) were receiving radiation therapy, and 29 (11.7%) were in a combined chemotherapy and radiation therapy phase.

The average duration of cancer diagnosis was 9.98 ± 9.41 months, with a range from 1 to 48 months. In terms of supportive care needs, elderly cancer patients reported the greatest need for assistance in the physical and daily functioning domains, while the least need was observed in the sexual domain (**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 illustrates the areas in which the greatest need for support was reported by participants according to the SCNS-SE questionnaires. The most significant unmet need, identified by 2.76% of respondents, was related to “understanding what can be done to improve your condition.” A statistically significant difference was observed in the support and care needs between women and men across various domains, except for the

psychological domain ($P < 0.05$). Specifically, elderly women expressed a higher need for assistance in physical and daily functioning, while elderly men required more support in other areas. Additionally, elderly individuals aged 60 to 74 years reported higher needs for assistance in the areas of health, sexual health, and information systems.

Table 2. Prevalence of supportive care needs among elderly cancer patients.

Area	Supportive care needs	Number (Percentage)
Health and	Understanding actions to improve one's health	189 (76.2%)

information system		
	Learning about the disease's progress and recovery status	154 (62.1%)
Support and care	Attention and empathy from hospital staff regarding emotional needs	172 (69.4%)
	Timely availability of medical personnel to address physical needs	164 (66.1%)
Psychological	Having confidence about the future	156 (62.9%)
	Learning how to manage emotions related to the disease situation	147 (59.3%)
Physical and daily performance	Feeling fatigued or lacking energy	131 (52.8%)
	Experiencing poor health frequently	127 (51.2%)

No significant correlation was found between literacy levels and the extent of support and care needs ($P = 0.4$). However, a noteworthy association was observed between elderly patients' physical and daily performance needs and their health and information systems, as well as their place of residence ($P < 0.05$).

The current study reveals that the most significant care needs for elderly cancer patients, in order of priority, are in the physical domain, daily functioning, health and information systems, support and care, psychological aspects, and sexual health. Notably, elderly women indicated a higher demand for assistance in physical and daily functioning, while elderly men expressed more need for help with sexual health, support and care, and health-related information.

In this study, elderly cancer patients most frequently reported the need for assistance with physical health and daily functioning. Other studies have shown a dominant need in the health and information systems domain [6, 24-26]. This discrepancy can be attributed to differences in the study populations. Previous research typically focused on adult cancer patients, whereas this study specifically examined elderly cancer patients. The elderly face unique physical and physiological challenges due to aging, which may explain their heightened need for support in physical and daily functions, with cancer intensifying these conditions.

In a Canadian study by Tremblay *et al.* [27], elderly cancer patients identified pain, nausea, and difficulties with daily activities as their most pressing support needs, which is similar to the results of this study.

The current study found that the elderly had the highest need for support related to fatigue and lack of energy. In a study by Nair *et al.* in the UAE, 75% of adult cancer patients reported fatigue as their primary issue, which was also higher than other concerns in the physical domain [28]. This aligns with the current findings and

can likely be explained by the natural fatigue that accompanies aging. As people age, they experience physiological changes that contribute to increased fatigue, which is further exacerbated by cancer.

In terms of psychological needs, the elderly in this study expressed a significant need for confidence about the future. This finding is in line with Nair *et al.*'s study on adult cancer patients, where gaining confidence about the future was also reported as a major unmet psychological need [28].

This study identified that illiterate elderly individuals with cancer reported the most significant need for support in the psychological domain. A similar trend was found in a study by Cheah *et al.* which examined both adult and elderly patients with prostate cancer in Malaysia. Their research also revealed a link between literacy levels and psychological support needs, with those having lower literacy levels expressing greater needs for psychological assistance [25]. This increased demand for psychological support among illiterate elderly could be attributed to their limited understanding of the disease, treatment processes, and prognosis. The findings in this study, which showed a greater need for reassurance about the future and maintaining hope, reinforce this notion.

On the other hand, the sexual health domain showed the least reported need for help. Almost half of the elderly participants in this study indicated no need for assistance in any sexual health-related areas, which is consistent with findings from Pérez-Fortis *et al.* [29].

In terms of support and care, the elderly cancer patients highlighted the need for more attention from healthcare workers and for their emotional needs to be recognized. This may be due to the dual challenges posed by aging and cancer, leading elderly patients to expect more compassion and care. Additionally, a significant difference between men and women was found in this domain, with elderly men reporting higher support needs.

This could be because, in many cultures, women are expected to take more responsibility for self-care. Women, in contrast, expressed less need for help in the health and information system area. Many did not require written information regarding self-care and managing their disease at home. This is likely because 48% of the study participants were illiterate. Nevertheless, 76% of the elderly reported a significant need for guidance on improving their condition, and 62% sought information about their disease's status and recovery. This suggests that insufficient attention is given to educating cancer patients and their families, leaving them with numerous unanswered questions about cancer and treatment. The elderly aged 75 and above in the study showed less need for support in the health and information domain. This could be because, as their physical conditions worsen, they may feel less concerned with understanding medication side effects or accessing specialized care. As a result, healthcare professionals need to take the initiative in assessing and addressing the needs of this age group.

A limitation of the current study was the inability to classify participants based on the type of cancer and disease severity, due to time constraints. Future research could explore how supportive care needs vary according to cancer types, disease progression, and age groups. The findings of this study underline that elderly cancer patients have considerable unmet needs, especially in the physical and functional domains. These results could guide the development of more targeted supportive care services for elderly cancer patients. Future studies should also focus on the supportive care needs of various age groups and cancer types.

Conclusion

The findings of this study indicate that elderly individuals with cancer experience substantial support needs across most care areas, except the sexual domain. The most significant unmet needs were found in the physical and daily functioning areas. Specifically, there was a reported high demand for assistance related to the attention and support of hospital staff, as well as guidance on self-care practices. Therefore, recognizing the specific needs of elderly cancer patients is crucial in improving their satisfaction and ensuring that healthcare providers can focus on addressing these needs effectively, offering tailored care and support services for these individuals.

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