

RESEARCH ARTICLE

Attitudes of Nurses toward Supportive Care for Advanced Cancer Patients

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Abstract

The purpose of this study was to determine how nurses recognize the need for supportive care of advanced cancer patients and to provide preliminary data on how adequate circumstances are to be set up and maintained in Korea. For the purpose of this study, we developed a preliminary questionnaire based on a focus group of 8 nurses run by a clinical psychologist and administered it to 228 nurses in a cancer hospital, over a 3-month period. Participants of this study were nurses with more than 5 years' experience of treating advanced cancer patients. The result showed that 207 respondents (90.8%) agreed that a smooth communication system for treatment taking into account the symptoms experienced by patients and rehabilitation issues was needed. More than 80% agreed that the items needed for an integrated management service for advanced cancer patients should include psychological support, an integrated pain and symptom management, and education for the patient and his or her caregivers. These results strongly suggest that a new system distinct from palliative care or hospices is needed for patients with advanced cancer in Korea.

Key words: Supportive care - advanced cancer patient - integrated management service

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Introduction

In 2008, 17.8 million persons were newly diagnosed with cancer, increased of 7.8 percent over 16.6 million new diagnoses in 2007. The crude incidence rate of all cancers was 361.9 per 100,000 (375.7 for men, 348.1 for women) and the age-standardized incidence rates in 2000 was 286.8 per 100,000 (327.1 for men, 269.1 for women) (National Cancer Information Center, 2011). The incidence of cancer in Korea has increased constantly, but the 5-year cancer survival rates have been improved as cancer treatment has improved; the five-year relative survival rate for cancer patients in Korea is 59.5%, with more than 70 million cancer survivors (National Cancer Information Center, 2011).

Cancer patients undergo a great deal of physical, psychological, and social suffering for a long period of time from the time of cancer diagnosis and during or after treatment, despite the development of medical treatment and increased survival (Landmark and Wahl, 2002). In particular, the patients with advanced cancer have to face many problems during the progression of the disease such as pain, fatigue, energy depletion, and loss of

appetite, along with physical symptoms of cancer itself. In addition, cancer patients have a variety of psychological symptoms, suggestive of anxiety, depression, and sleep disorder. The prevalence of physical and psychological symptoms are varied according to the reported research by 35-96% for pain, 3-77% for depression, 13-79% for anxiety, 32-90% for fatigue, 10-70% for dyspnea, and 9-69% for sleep disorders (Solano et al., 2006).

It was reported that the suicide rate of cancer patients compared to the general population was relatively high; this was particularly true for cancer patients who had died within 1 year of follow-up after diagnosis, who were 3.24 times more likely to have committed suicide than the general population (Ahn, 2009). High-quality evidences attest to the value of psychosocial interventions in improving well-being and reducing emotional distress for patients with cancer (Devine, 2003; Rehse and Pukrop, 2003; Osborn et al., 2006; Potrata, 2011).

Supportive care is defined as the provision of the necessary services for those living with or affected by cancer to meet their physical, emotional, social, psychological, informational, spiritual and practical needs during the diagnostic, treatment, and follow-up

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phases, encompassing issues of survivorship, palliative care and bereavement (Fitch, 2008). The supportive care of patients with cancer improves patients' quality of life (Rosenbaum et al., 2004) and increases patients' survival rate (Alfano and Rowland, 2006).

Symptom management of cancer patients and Supportive Care Research in Korea has been focused on primarily the prevalence of physical symptoms or pain, with few interventions aimed to alleviate symptoms. In this process, many interventions have been proved as an effective method for alleviating symptoms of cancer patients but it has been pointed that usually the results of these interventions have not been used in the actual clinical practice in Korea.

We conducted this study to figure out how nurses recognized the increased need for supportive care for cancer patients and to provide the preliminary data to set up an adequate system which is suitable for Korean circumstances.

Materials and Methods

This study was performed at the Cancer Hospital located in the Gyeonggi Province. The Institutional Review Board of the Cancer Hospital approved this study (Approved number: NCCNCS-10-326). A preliminary questionnaire was developed by a focus group of 8 oncology nurses who are working in supportive care of cancer patients for more than 10 years. To avoid subjectivity of focus group, a trained clinical psychologist conducted a group interview.

The themes of interview were the necessity of supportive care, symptoms and the problems experience by cancer patients, awareness of managing patients' symptoms, and problems of communication between medical staffs, etc.

The preliminary questionnaire was reviewed by an oncology nurse, an oncologist, and a clinical psychologist for content validity. The final version of questionnaire was composed of questions with a Cronbach's $\alpha = .9$ or more. The questionnaire is composed of 62 items, 1) Perceptions for the management of cancer patients (11 items), 2) Integrated management system for cancer patients symptoms and rehabilitation (10 items), 3) Major problems in the administration of nursing interventions for cancer patients (13 items), 4) Collaboration with other experts in the nursing care of cancer patients (7 items), 5) Nurses' perceptions of medical oncologist management of cancer patient (9 items), 6) Experience of collaborating with medical oncologist in cancer patient management (12 items).

To investigate the nurse's perception of supportive care, the survey for this study was conducted in 228 nurses in cancer hospital over a 3-month period with the developed questionnaire. All subjects participated voluntarily in this study and answered the questionnaire in a private place.

Results

Most of the responding nurses were female ($n=226$, 99.1%) and their age was under 40. The clinical experience of most respondents was a period of 5-9 years ($n=154$, 67.5%). More than half of the respondents ($n=125$, 54.8%) were involved in caring management of advanced cancer patients most of their working time (76-100%).

Perceptions for the management of cancer patients

Greater than 80% of respondents agreed (agree or strongly agree) to each of the following statements:

All cancer centers should provide the rehabilitation medical service for impaired functioning and disabilities ($n=186$, 81.6%);

All cancer centers should provide the medical service for physical and psychological symptoms ($n=202$, 88.6%);

Be required the system to communicate smoothly with medical oncologists and specialist to each symptoms for rehabilitation of patients ($n=207$, 90.8%);

Be required the expert to access actively for symptoms and rehabilitation of patients ($n=205$, 89.9%);

Be required the medical service for symptoms and rehabilitation of patients in addition to simple hospital stay ($n=209$, 91.6%);

Be required the overall management for expected symptoms before the patient complains ($n=198$, 86.8%);

Be required to provide multidisciplinary access to support patients for personal issues (Ex, economic status, family, etc.) ($n=200$, 87.8%) (see Table 2).

More than 80% of participants responded emotional support, symptom management such as pain, and education for patient and family are needed. Cancer pain, nausea and vomiting, constipation or diarrhea, and

Table 1. General Characteristics

			(N=228)
Sex	Male	1	(0.4%)
	Female	226	(99.1%)
Age(years)	20-29	165	(75.7%)
	30-39	50	(22.9%)
	40-49	3	(1.4%)
	≥ 50	0	(0.0%)
	Missing	10	
	Years of experience	<5	11
	5-9	154	(67.5%)
	10-14	41	(18.0%)
	15-19	19	(8.3%)
	20-24	2	(0.9%)
	>25	1	(0.4%)
Involvement in management of patients with advanced cancer	Not related	2	(0.9%)
	1-25%	39	(17.1%)
	26-50%	8	(3.5%)
	51-75%	53	(23.3%)
	76-100%	125	(54.8%)

edema were major problems, which were often faced in the administration of nursing intervention for cancer patients.

Collaboration with other experts for nursing care of cancer patients

Other specialist such as Psychiatry, Anesthesiology, and Neurology are the most common collaborators with nurses for the care of cancer patients. Greater than 70% of respondents agreed (or strongly agreed with following items: The rehabilitation specialist should take on the role

of coordinating for rehabilitation (72.8%); Each medical specialist should take on the role of coordinating for the management of physical and psychological symptoms (70.9%) (Table 3).

Regarding the experience of collaborating with medical oncologist in the cancer patient management, almost 70% of respondents agreed (or strongly agreed) with the following item; In addition to medical oncologists by themselves it would be an improvement to have someone to manage symptoms and rehabilitation (Table 4).

Table 2. Perceptions for the Management of Cancer Patients

Category	Disagree strongly	Disagree	Don't know	Agree	Agree strongly
All cancer centers should provide the rehabilitation medical service for impaired functioning and disabilities	0(0.0%)	9(4.0%)	31(13.6%)	137(60.1%)	49(21.5%)
All cancer centers should provide the medical service for physical and psychological symptoms	0(0.0%)	4(1.8%)	20(8.8%)	131(57.5%)	71(31.1%)
Do not having a time to directly managing for symptoms and rehabilitation of patients	2(0.9%)	28(12.3%)	79(34.7%)	84(36.8%)	33(14.5%)
Be required the system to communicate with smoothly medical oncologists and specialist of each symptoms for symptoms and rehabilitation of patients	0(0.0%)	1(0.4%)	18(7.9%)	125(54.8%)	82(36.0%)
Be required the expert to access actively for symptoms and rehabilitation of patients	0(0.0%)	1(0.4%)	20(8.8%)	112(49.1%)	93(40.8%)
Be required the medical service for symptoms and rehabilitation of patients in addition to duration of hospital stay	0(0.0%)	1(0.4%)	16(7.0%)	120(52.6%)	89(39.0%)
Lack of perceptions among patients for symptoms and rehabilitation	1(0.4%)	16(7.0%)	55(24.1%)	129(56.6%)	24(10.5%)
Be required the overall management for expected symptoms before the patient complains	0(0.0%)	2(0.9%)	25(11.0%)	141(61.8%)	57(25.0%)
No tool for objectively assess for symptoms of patients	0(0.0%)	10(4.4%)	90(39.5%)	96(42.1%)	29(12.7%)
Be required the multidisciplinary access to consider for personal issues of patients(Ex, economic status, family, etc)	0(0.0%)	1(0.4%)	24(10.5%)	113(49.6%)	87(38.2%)
Be required the new system to consolidate departments, not current referral system from each departments	0(0.0%)	7(3.1%)	47(20.6%)	103(45.2%)	68(29.8%)

Table 3. Nurse's Perceptions for Medical Oncologist and Cancer Patient Management

Category	Disagree strongly	Disagree	Don't know	Agree	Agree strongly
Medical oncologists should coordinate the care of cancer patients at all stages of disease, including end of life care	0(0.0%)	28(12.3%)	63(27.6%)	107(46.9%)	29(12.7%)
Medical oncologists should be expert in the management of the impaired functioning and disabilities of advanced cancer patients	0(0.0%)	13(5.7%)	99(43.4%)	101(44.3%)	14(6.1%)
Medical oncologists received good training in the management of the physical and psychological symptoms of advanced cancer patients	3(1.3%)	21(9.2%)	108(47.4%)	82(36.0%)	13(5.7%)
Medical oncologists take on the role of coordinating for the impaired functioning and disabilities of advanced cancer patients	2(0.9%)	28(12.3%)	90(39.5%)	91(39.9%)	16(7.0%)
Medical oncologists take on the role of coordinating for managing physical and psychological symptoms	0(0.0%)	13(5.7%)	82(36.0%)	109(47.8%)	22(9.7%)
Rehabilitation specialist should take on the role of coordinating for rehabilitation	0(0.0%)	4(1.8%)	56(24.6%)	120(52.6%)	46(20.2%)
Each medical specialist should take on the role of coordinating for the management of physical and psychological symptoms	0(0.0%)	12(5.3%)	53(23.3%)	127(55.7%)	34(14.9%)
Medical oncologist is the expert for the management of physical and psychological symptoms of advanced cancer patients.	0(0.0%)	26(11.4%)	82(36.0%)	98(43.0%)	19(8.3%)
Supportive care specialist should take charge of managing symptoms and rehabilitation	0(0.0%)	17(7.5%)	70(30.7%)	115(50.4%)	23(10.1%)

Table 4. Experience of Collaborating with Medical Oncologist in the Cancer Patient Management

Category	Disagree strongly	Disagree	Don't know	Agree	Agree strongly
Medical oncologists can evaluate well the impaired functioning and disabilities of advanced cancer patients	0(0.0%)	8(3.5%)	118(51.8%)	93(40.8%)	7(3.1%)
Medical oncologists can evaluate well the physical and psychological symptoms of advanced cancer patients	0(0.0%)	14(6.1%)	111(48.7%)	93(40.8%)	8(3.5%)
Most of the medical oncologists who I know are the expert for managing physical and psychological symptoms	2(0.9%)	45(19.7%)	101(44.3%)	73(32.0%)	5(2.2%)
Medical oncologist is the expert for managing physical and psychological symptoms	1(0.4%)	28(12.3%)	111(48.7%)	77(33.8%)	8(3.5%)
Managing for symptoms of advanced cancer patients by medical oncologists is the most satisfied	4(1.8%)	25(11.0%)	115(50.4%)	72(31.6%)	10(4.4%)
Medical oncologist has extensive knowledge for the treatment of physical and psychological symptoms	0(0.0%)	15(6.6%)	103(45.2%)	96(42.1%)	12(5.3%)
Medical oncologist has extensive knowledge for the treatment of rehabilitation of advanced cancer patients	1(0.4%)	36(15.8%)	112(49.1%)	71(31.1%)	6(2.6%)
In addition to medical oncologists it is better to be someone to manage symptoms and rehabilitation	1(0.4%)	11(4.8%)	55(24.1%)	124(54.4%)	35(15.4%)
Medical oncologist manage successfully the physical symptoms including cancer pain of advanced cancer patients	2(0.9%)	33(14.5%)	118(51.8%)	67(29.4%)	6(2.6%)
Medical oncologist resolve well the psychological problems of advanced cancer patients	7(3.1%)	61(26.8%)	123(54.0%)	32(14.0%)	3(1.3%)
Medical oncologist manage successfully the impaired functioning and disabilities of advanced cancer patients	5(2.2%)	37(16.2%)	137(60.1%)	43(18.9%)	4(1.8%)
Other specialists do not have a full understanding on oncology to counsel advanced cancer patients	2(0.9%)	73(32.0%)	111(48.7%)	37(16.2%)	3(1.3%)

Discussion

In overseas countries other than Korea, multi-disciplinary programs on Supportive Care for Cancer Patients have been implemented. Among them, Stanford Supportive Care Program (Solano et al., 2006) in particular has provided supportive interventions including a counseling service to a patient and his or her family on psychological and social support, exercises, complementary and alternative therapy, fatigue/nutrition, and pain management with an aim to improve the quality of life of a survived patient by diagnosis and to reduce the amount of cancer treatment-related side effects. Furthermore, it has offered education to patients, to their family, and to their friends via courses, print-outs, videos and a website. This program has been reported to have a beneficial effect on improving the well-being and quality of life of cancer patient.

In the UK, the availability for expertise in the nation's cancer management service, the interdisciplinary team approach, and the suitable access for palliative care, psychological, social and spiritual support have been emphasized (Morris et al., 2007). For this reason, a community-based Cancer Support Nurse (CSN), who plays an essential role in this service, has been operated. This service has been developed and placed for many years as interventions for desired requirements which were expected to be provided to patients and their family by health-related workers (Brogaard et al., 2011).

In a discussion on Supportive Care for Cancer Patients (ONS Symposia, 2006), nurse plays a key role

in improving the results of treatment and the quality of patient life. A nurse's perception of supportive care is important, even in its provision.

Taking a look at research that deals with Supportive Care or Perception of a medical team for Palliative Care, in the study which was investigated attitude toward palliative care of advanced cancer patients (European Society of Medical Oncology Taskforce on Palliative and Supportive Care (ESMO), 2003), most oncologists thought supportive care or palliative care was important. In addition, they said they were dealing with physical symptoms, such as general pain, fatigue, emesis, and cures for conditions, that is, depression, anxiety, mental distress and delirium. Among them, 74% were satisfied with care for terminally ill patients, but 42% responded they had lack of training to accomplish these. In contrast, a study aimed at nurses responded that lack of time was the key barrier for providing supportive care to patients.

From those participated in this research, 186 respondents (81.6%) reported that all cancer treatment centers should deliver healthcare services for any malfunction or disorder, and 117 respondents (51.3%) responded that cancer treatment centers should provide medical services to patients with physical and psychological symptoms, but had not enough time to directly get involved with the issues, such as symptoms experienced by patients and rehabilitation due to lack of time. Also, 207 respondents (90.8%) agreed that smooth communication system on treatment of symptoms which were undergone by patients and on rehabilitation issues was needed. A total of 153 respondents (67.1%)

responded that the perception of rehabilitation and symptom management were lacking, and there has been no tool to assess it objectively (125 respondents, 54.8%). Thus, such issues were needed during the hospitalization and even after the patients had been discharged (209 respondents, 91.6%). An overall management of symptoms before patients complain was needed (198 respondents, 86.8%) and for this, a multi-disciplinary approach was necessary (200 respondents, 87.8%). Accordingly an integrated approach was required, not a way department was commissioned (171 respondents, 75.0%). More than 80% of respondents responded that it was needed for an integrated management service including psychological support service, an integrated pain and symptom management, an education for the patient and his or her caregivers.

Among all items involved in intervention for a cancer patient, the cancer-related pain was most common (215 respondents, 94.3%) and the followings were constipation or diarrhea, nausea and vomiting in interventions of physical symptoms. In addition, it was found that chemotherapy side effects, depression, anxiety and psychological problems were often involved. Such symptoms were often worked primarily with medical specialists from other departments, and it showed that a new system distinguished from a palliative care or hospice was needed.

The results from this study suggest rehabilitation for both physical and psychological problem, assessment tool for symptom management and education should be provided by nurses who caring cancer patients even after patients have been discharged as well as in their hospital days. To do this, multidisciplinary system for supporting nurses who are caring cancer patients was essential.

Supportive care programs offer ways of coping on unwanted influence of treatment which could be resulted in psychosocial symptoms like anxiety, depression, feeling of isolation as well as cancer itself (Harrison et al., 2009). Accordingly the results of this study were in accordance with previous study which gave importance to multi-disciplinary intervention for cancer patients in broad aspect such as physical, emotional, environmental, spiritual, social, sexual, financial and cultural (Park, 2010).

However, the result or current study showed that respondents were there was no collaboration with psychologists (60.1%), social workers (35.1%), and home care nurse (24.1%). It can be concluded that multidisciplinary intervention was inadequate in current system.

Supportive care can improve quality of life (Shim and Park, 2004) and reduce stress of cancer patients (Liao et al., 2011) by helping patients to adjust positively in uncertain situation (Karver and Berger, 2010). Therefore, systemized supportive care system for advanced cancer patients is required including objective assessment tools. This kind of supportive care should be separated from existing hospice and palliative care.

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