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Factors related to the decision
for the place of care among terminal
cancer patients after consultation
with palliative care team

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for the place of care among terminal
cancer patients after consultation
with palliative care team

Directed by Professor Yong-Jae Lee

The Master's Thesis submitted to the Department of
Medicine, the Graduate School of Yonsei University
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ABSTRACT

Factors related to the decision for the place of care among terminal cancer patients after consultation with palliative care team

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Purpose Utilization of hospice palliative care (HPC) is promoted by national policy in Korea. However, few studies have sought to identify patterns of HPC utilization among terminal cancer patients. We aimed to investigate patterns of deciding on a place of care for terminal cancer patients and factors related therewith after consultation with a palliative care team (PCT).

Materials and methods We reviewed medical records for 1,028 terminal cancer patients who were referred to the PCT of the National Cancer Center in 2010 and 2014. We compared the characteristics of the patients who decided to utilize HPC units (HPCUs) and those who did not. We also analyzed factors influencing choices for a medical institution and reasons for not selecting an HPCU.

Results The patients' mean age was 61.0 ± 12.2 , with lung cancer

patients (24.3%) comprising the largest percentage of these patients. The percentage of referred patients who utilized an HPCU was 53.9% in 2014, increasing from 44.6% in 2010. Older age and awareness of terminal illness were found to be positively associated with utilization of an HPCU. The most common reason for not selecting an HPCU was “refusing hospice” (34.9%), followed by being “near death,” “poor accessibility to an HPCU,” and “caregiving problems.”

Conclusion Compared to 2010, HPC utilization by terminal cancer patients in Korea increased in 2014. Earlier discussion of end-of-life care with patients and family caregivers may help further promote utilization of HPCUs.

Key words : hospice, palliative care, referral, place of care, terminal cancer

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I. INTRODUCTION

Utilization of hospice palliative care (HPC) for patients with terminal illness is increasing globally¹⁻³. Nonetheless, there remains a significant unmet need for HPC⁴. Moreover, the demand for HPC is expected to increase among aging populations¹.

Previous studies have revealed that most patients are referred to HPC late in the course of their illness. The median survival from initial HPC enrollment to patient death ranges from 17 days to 1.9 months, and 9-25% of the patients die within a week after their initial referrals⁵⁻¹⁰. According to the literature, the reason for the delay in the use of HPC among terminal cancer patients is related to the patients themselves, their family caregivers and physicians, and health care systems. Patients who are unaware of their terminal status and whose family caregivers have negative impressions toward HPC are likely to end up with a late referral to HPC^{11,12}. Barriers related with physicians include a lack of knowledge, negative perceptions of HPC, difficulties with communicating poor

prognosis to patients or caregivers, and late discussions about HPC¹³. Finally, a lack of accessibility to HPC and complicated admissions criteria delay and deter the use of HPC among terminal cancer patients^{13,14}.

Although the first hospice clinic in Korea opened in 1965, HPC developed very slowly up until 2000. Government policies for HPC developed in 2005^{15,16} have resulted in a significant increase in the number of designated HPC units (HPCU) throughout South Korea, which as of 2016 totaled 76⁵. However, the utilization of HPC among Korean cancer decedents has been reported as low as 15.0% in 2015⁵. Moreover, almost half of patients who were admitted to an HPCU died within 15 days⁵. In other words, a considerable number of terminal cancer patients use HPCU at a time only when their life expectancy is short.

Various factors are thought to influence decisions on place of care for terminal cancer patients. According to a survey of 108 bereaved family members in 1998, terminal cancer patients received medical care through hospitalization (45.4%), outpatient clinics (22.2%), and the emergency department (16.7%)¹⁷. Meanwhile, although there has been a change in efforts to improve awareness of HPC and the number of HPCUs, recent data on the patterns of utilization for places of care among terminal cancer patients are lacking. In addition, even though palliative care consultations have been found to promote discussion of plans and preferences for future care among patients and their families¹⁸, there has been no study on health care utilization of terminal cancer patients after consultation with a palliative care team (PCT) in Korea.

Therefore, this study aimed 1) to investigate decisions on place of care and related factors among terminal cancer patients after consultation with a PCT and 2) to examine how these changed between 2010 and 2014 in South Korea.

II. MATERIALS AND METHODS

1. Study design and participants

We performed a retrospective analysis of medical records for terminal cancer patients who were referred to the PCT of the National Cancer Center in Gyeonggi, South Korea in 2010 and 2014. Patients who selected medical facilities as their place of care after PCT consultation were included in this analysis. Patients who opted for staying home and who did not decide on a place of care were excluded.

Oncology physicians with the National Cancer Center referred terminal cancer patients to the PCT, which consisted of a physician specializing in HPC and an advanced practice nurse. Patients were diagnosed with terminal cancer if they had advanced cancer without response to chemotherapy or if they were not able to receive radical treatment due to deteriorating condition or refusal of chemotherapy. The PCT assessed the patients and discussed with the patients and/or their caregivers to establish care plans, including place of care. In addition, the PCT controlled the patients' physical and psychological symptoms, provided psychosocial support for the patients and their family, and explained HPC. After the PCT recommended an appropriate place of care in accordance

with the patients' medical condition and patients/caregiver demands, the patients and their caregivers decided on the place of care.

Our study was approved by the Institutional Review Board of the National Cancer Center (IRB no. NCC2016-0251).

2. Data acquisition and analysis

From electronic medical records, we collected each patient's age, sex, primary site of cancer, level of education, residential area, marital status, and religion. Using medical records and consultation records, we obtained information on who received consultation, the patient/caregiver's awareness of terminal status, the choice of place of care, and the reason why participants did not choose an HPCU if they chose a non-HPCU. The places of care were divided into two groups: HPCUs designated by the Korean Ministry of Health and Welfare and non-HPCUs defined as all medical facilities other than an HPCU. Non-HPCUs were subdivided into current hospital (National Cancer Center), other general hospitals, and long-term hospitals. The reasons for choosing a non-HPCU were categorized as refusing hospice, near death, poor accessibility to HPCU, and caregiving problems. "Refusing hospice" meant that patients or their caregivers were reluctant to choose HPC due to negative impressions toward HPC or that they preferred the current hospital to another facility. "Near death" was defined as a case in which death was predicted within a few days after consultation. "Poor accessibility to HPCU" referred to the lack of an available HPCU near the

patient's residence or available beds at the HPCU. "Caregiving problems" signified that the patient did not have any family caregiver or could not afford to hire a paid caregiver. Two authors (PSJ and NEJ) reviewed the medical records independently, determining and assigning data to their appropriate categories. We reviewed discharge records to verify which medical facilities the patients actually used after consultation. If the number of reasons for selecting a non-HPCU was greater than 1, two authors explored the medical records again and decided the main cause.

3. Statistical Analysis

Descriptive statistics were used to summarize the characteristics of the patients, place of care, and reasons for selecting non-HPCUs. The patients/caregivers' characteristics of the HPCU and non-HPCU groups were compared using the Chi-squared test for categorical data and Student's t-test for continuous data. We performed binomial logistic regression analysis with a backward selection algorithm to investigate factors related to the participants' decision to utilize HPCU. Multinomial logistic regression analysis with a backward selection algorithm was used to identify factors related to the patients' decisions to utilize individual subcategories of non-HPCU facilities and their reasons for choosing a non-HPCU, compared with HPCUs. All statistical analyses were conducted using STATA, version 12.0 (STATA Corp., TX, USA), and a P-value < 0.05 was considered statistically significant.

III. RESULTS

A total of 1,070 terminal cancer patients were referred to the PCT in 2010 and 2014. Among these, 15 patients were excluded because they selected their home for the place of care, and 27 patients who were reluctant to decide on a place of care were also excluded. Finally, 1,028 terminal cancer patients were included in this study.

1. General characteristics of participants

Table 1 summarizes the characteristics of patients according to their decisions on HPC. The number of referred patients increased from 388 in 2010 to 640 in 2014. The mean age of the patients was 61.0 ± 12.2 , with 55.1% of the patients being male. The most common diagnosis was lung cancer (24.3%), followed by stomach cancer (13.8%). While 44.6% (173 patients) of referred patients used HPCUs after consultation in 2010, this increased to 53.9% (345 patients) in 2014. Univariable analyses showed that the year, patient's age, and patients/caregivers' awareness of terminal illness influenced HPCU use.

2. Factors related with decision for HPCU

Table 2 presents the factors significantly related to deciding to use HPCUs according to binomial logistic regression analysis. Compared with 2010, patients who were referred in 2014 were more likely to use HPCUs (odds ratio (OR), 1.43; 95% confidential interval (CI), 1.10-1.86). Older age (OR, 1.14; 95% CI,

Table 1. General characteristics of patients

	Total N(%)	HPCU N(%)	Non-HPCU N(%)	p-value
N	1,028	518(50.4)	510(46.6)	
Year				
2010	388(37.7)	173(44.6)	215(55.4)	
2014	640(62.3)	345(53.9)	295(46.1)	0.004*
Age				
Mean±SD(years)	61.0±12.2	61.9±11.8	60.1±12.4	0.017*
Gender				
Male	566(55.1)	287(55.4)	279(54.7)	
Female	462(44.9)	231(44.6)	231(45.3)	0.822
Primary site of cancer				
Lung	250(24.3)	125(24.1)	125(24.5)	
Stomach	142(13.8)	78(15.1)	64(12.5)	
Liver	123(12.0)	62(12.0)	61(12.0)	
Pancreaticobiliary	123(12.0)	68(13.1)	55(10.8)	
Colorectal	112(10.9)	50(9.7)	62(12.2)	
Gynecologic	78(7.5)	39(7.5)	39(7.6)	
Others	200(19.5)	96(18.5)	104(20.4)	0.635
Education				
Middle school or less	455(44.2)	241(46.5)	214(42.0)	
High school or over	559(54.4)	269(51.9)	290(56.8)	0.125
Missing	14(1.4)	8(1.6)	6(1.2)	
Residential area				
Gyeonggi ¹⁾	618(60.1)	305(58.9)	313(61.4)	
Seoul	218(21.2)	120(23.2)	98(19.2)	
Chungcheong	70(6.8)	39(7.5)	31(6.0)	
Gyeongsang	58(5.7)	24(4.6)	34(6.7)	
Jeolla/Gangwon/Jeju	64(6.2)	30(5.8)	34(6.7)	0.272
Marital status				
Unmarried	247(24.0)	118(22.8)	129(25.3)	
Married	781(76.0)	400(77.2)	381(74.7)	0.346
Having a religion				
No	444(43.2)	220(42.5)	224(43.9)	
Yes	573(55.7)	291(56.2)	282(55.3)	0.696
Missing	11(1.1)	7(1.3)	4(0.8)	
Interviewee				
Spouse	481(46.8)	240(46.3)	241(47.2)	
Children	393(38.2)	202(39.0)	191(37.5)	
Others	140(13.6)	74(14.3)	66(12.9)	0.799
Missing	14(1.4)	2(0.4)	12(2.4)	

Patients' awareness of terminal status

Unaware	369(35.9)	171(33.0)	198(38.8)	0.029*
Aware	645(62.7)	345(66.6)	300(58.8)	
Missing	14(1.4)	2(0.4)	12(2.4)	

Caregivers' awareness of terminal status

Unaware	18(1.8)	1(0.2)	17(3.3)	< 0.001*
Aware	988(96.1)	511(98.6)	477(93.5)	
Missing	22(2.1)	6(1.2)	16(3.2)	

HPCU, Hospice-palliative care units; SD, Standard deviation.

¹⁾Where the National Cancer Center is located.

*p-value<0.05

1.03-1.27) and awareness of the patients' terminal condition by the patients (OR, 1.35; 95% CI, 1.04-1.77) and their caregivers (OR, 15.40; 95% CI, 2.03-117.00) were positively associated with choosing HPCUs.

Table 2. Factors associated with deciding on HPCU

	Adjusted OR (95% CI)	p-value
Year		
2010 ¹⁾	1.00	
2014	1.43(1.10-1.86)	0.007
Age (per 10 years)	1.14(1.03-1.27)	0.012
Patients' awareness of terminal status		
Unaware ¹⁾	1.00	
Aware	1.35(1.04-1.77)	0.026
Caregivers' awareness of terminal status		
Unaware ¹⁾	1.00	
Aware	15.40(2.03-117.00)	0.008

HPCU, Hospice-palliative care units; OR, Odds ratio; CI, Confidence interval.

¹⁾References

Binomial logistic regression analysis with backward selection.

3. Factors related to the decision for the place of care among non-HPCU group patients

Table 3 shows the results of the multinomial logistic regression for places of care. Among participants who did not choose an HPCU, 290 (56.9%) patients decided to receive care in the current hospital, while 132 (25.9%) and 88 (17.2%) patients selected other general hospitals and long-term hospitals, respectively. Patients who received palliative care consultations in 2014 were less likely to use other general hospitals (OR, 0.40; 95% CI, 0.26-0.59) and a long-term hospital (OR, 0.38; 95% CI, 0.24-0.62), compared to those who did in 2010. Older patients were related with less utilization of the current hospital and increased utilization of long-term hospitals. Patients who lived in Jeolla, Gangwon, and Jeju provinces were negatively associated with choosing current hospitals and positively associated with choosing other general hospitals. Patients and caregivers aware of terminal illness were less likely to choose all three of the non-HPCU facilities.

4. Factors related to reasons for selecting non-HPCU

The most common reason for not selecting an HPCU was “refusing hospice” (34.9%), followed by “near death” (34.7%), “poor accessibility to HPCU” (17.7%), and “caregiving problems” (12.7%) (Table 4). Among the patients who refused hospice, 53.4% did not want HPC, and the others preferred their current hospital (data not shown). Compared to 2010, poor accessibility and caregiving

Table 3. Factors associated with deciding on non-HPCU according to chosen place of care

	Current hospital		Other general hospital		Long-term hospital	
	Adjusted OR (95% CI)	<i>p</i> -value	Adjusted OR (95% CI)	<i>p</i> -value	Adjusted OR (95% CI)	<i>p</i> -value
N(%)	290(56.9)		132(25.9)		88(17.2)	
Year						
2010 ¹⁾	1.00		1.00		1.00	
2014	1.09(0.79, 1.50)	0.589	0.40(0.26, 0.59)*	<0.001	0.38(0.24, 0.62)*	<0.001
Age (per 10 years)	0.78(0.69, 0.88)*	<0.001	0.90(0.76, 1.06)	0.218	1.34(1.07, 1.67)*	0.010
Residential area						
Gyeonggi ¹⁾	1.00		1.00		1.00	
Seoul	0.95(0.66, 1.36)	0.771	0.54(0.29, 1.00)	0.050	0.62(0.33, 1.13)	0.120
Chungcheong	0.51(0.26, 1.00)	0.050	1.44(0.70, 2.94)	0.319	0.64(0.23, 1.75)	0.382
Gyeongsang	0.58(0.27, 1.25)	0.166	3.51(1.79, 6.87)*	<0.001	0.60(0.17, 2.18)	0.441
Jeolla/Gangwon/Jeju	0.45(0.21, 0.99)*	0.048	3.19(1.65, 6.13)*	0.001	0.76(0.25, 2.29)	0.625
Patients' awareness of terminal status						
Unaware ¹⁾	1.00		1.00		1.00	
Aware	0.87(0.63, 1.20)	0.394	0.58(0.38, 0.88)*	0.010	0.71(0.43, 1.16)	0.168
Caregivers' awareness of terminal status						
Unaware ¹⁾	1.00		1.00		1.00	
Aware	0.07(0.01, 0.57)*	0.013	0.18(0.02, 2.14)	0.175	0.02(0.00, 0.17)*	<0.001

HPCU, Hospice-palliative care units; OR, Odds Ratio; CI, Confidence Interval.

¹⁾Reference

**p*-value<0.05

Multinomial logistic regression analysis with backward selection(reference group: patients who selected HPCU)

Table 4. Factors associated with reasons for deciding on non-HPCU

	Refusing hospice care		Near death		Poor accessibility to HPCU		Caregiving problem	
	Adjusted OR (95% CI)	P-value	Adjusted OR (95% CI)	P-value	Adjusted OR (95% CI)	P-value	Adjusted OR (95% CI)	P-value
N(%)	178(34.9)		177(34.7)		90(17.7)		65(12.7)	
Year	1.00		1.00		1.00		1.00	
2010 ¹⁾	1.00		1.00		1.00		1.00	
2014	0.89(0.61, 1.28)	0.528	0.91(0.63, 1.31)	0.596	0.32(0.19, 0.52)*	<0.001	0.47(0.27, 0.81)*	0.006
Gender	1.00		1.00		1.00		1.00	
Male ¹⁾	1.00		1.00		1.00		1.00	
Female	1.29(0.90, 1.84)	0.166	0.90(0.63, 1.28)	0.544	0.50(0.30, 0.83)*	0.007	1.43(0.83, 2.45)	0.199
Age (per 10 years)	0.84(0.73, 0.98)*	0.025	0.81(0.70, 0.94)*	0.005	0.80(0.65, 0.97)*	0.024	1.50(1.15, 1.94)*	0.002
Residential area	1.00		1.00		1.00		1.00	
Gyeonggi ¹⁾	1.00		1.00		1.00		1.00	
Seoul	1.17(0.77, 1.78)	0.468	0.75(0.48, 1.17)	0.201	0.28(0.11, 0.74)*	0.010	0.57(0.29, 1.15)	0.115
Chungcheong	0.71(0.33, 1.51)	0.371	0.38(0.16, 0.93)*	0.035	2.35(1.11, 4.98)*	0.026	0.30(0.07, 1.34)	0.114
Gyeongsang	1.40(0.67, 2.92)	0.372	0.56(0.22, 1.43)	0.227	3.33(1.51, 7.36)*	0.003	0.49(0.11, 2.26)	0.359
Jeolla/Gangwon/Jeju	0.80(0.34, 1.84)	0.594	0.57(0.24, 1.36)	0.207	3.76(1.81, 7.81)*	<0.001	0.46(0.10, 2.02)	0.301
Patients' awareness of terminal status	1.00		1.00		1.00		1.00	
Unaware ¹⁾	1.00		1.00		1.00		1.00	
Aware	0.96(0.66, 1.41)	0.842	0.75(0.51, 1.08)	0.122	0.53(0.32, 0.87)*	0.012	0.68(0.39, 1.20)	0.184
Caregivers' awareness of terminal status	1.00		1.00		- ²⁾		1.00	
Unaware ¹⁾	1.00		1.00		- ²⁾		1.00	
Aware	0.04(0.00, 0.30)*	0.002	0.17(0.02, 1.95)	0.155	- ²⁾		0.02(0.00, 0.13)*	<0.001

HPCU, Hospice-Palliative Care Units; OR, Odds Ratio; CI, Confidence Interval.

¹⁾Reference

²⁾In the “poor accessibility to HPCU” group, all caregivers were aware of terminal status.

*p-value<0.05

Multinomial logistic regression analysis with backward selection(reference group: patients who selected HPCU)

problems were less likely to be reasons why patients did not choose an HPCU in 2014 (OR, 0.32 and 0.47 respectively; 95% CI, 0.19-0.52 and 0.27-0.81 respectively). Older patients were more likely to use a non-HPCU for caregiving problems. Patients in most residential areas were associated with poor accessibility to an HPCU, with the exception of Seoul (OR, 0.28; 95% CI, 0.11-0.74). Awareness of terminal status by both the patient and their caregiver tended to show negative associations with all four reasons.

5. Reasons for selecting non-HPCU according to the chosen places of care

Among non-HPCU patients, there was a significant difference in the reasons for selecting their chosen place of care (p -value <0.001 , Fig. 1). The most common reason for choosing their current hospital was “near death” (57.9%), and the second was “refusing hospice” (41.7%). 62.9% of the reasons for choosing other general hospitals was “poor accessibility to HPCU.” The majority (70.5%) of patients who chose long-term hospitals were unable to choose an HPCU due to “caregiving problems.”

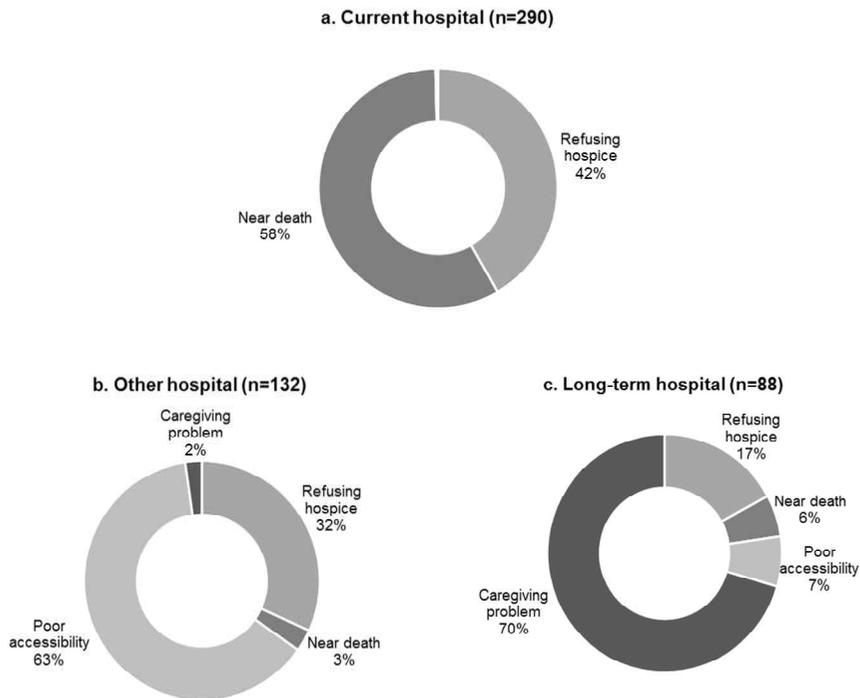


Fig. 1 Reasons for deciding on non-HPCU according to the chosen places of care.

IV. DISCUSSION

To the best of our knowledge, this is the first study to explore decisions on places of care and factors related therewith among terminal cancer patients after consultation with a PCT in Korea. The largest number (50.4%) of referred patients decided to use a HPCU, followed by their current hospital, other general hospitals, and long-term hospitals. The rate of HPCU utilization was much higher than that of all cancer decedents during the same time period in Korea (10.6% in 2010 and 13.8% in 2014)⁵. The first reason for the high rate of HPCU utilization in our study was that the patients and their caregivers were provided accurate

information on HPC during consultation with the PCT. This result was consistent with those from previous studies suggesting that palliative care consultation is associated with increased hospice utilization^{18,19}. The second reason was that the accessibility to HPCU was relatively fair among participants, since 81.3% of participants lived in Seoul and Gyeonggi, where HPCUs are concentrated⁵. Finally, the oncologist's knowledge of HPC might have affected their referral to PCT: oncologists without information about HPC might not refer their patients to PCT, while those knowledgeable in HPC would likely refer more patients to PCT.

The selection of HPCUs for terminal cancer patients after consultation increased by 43% in 2014, compared to 2010, while the selection of other general hospitals and long-term hospitals decreased. We speculate that the main reason for the increased use of HPCUs is that the number of HPCUs in Korea increased from 42 in 2010 to 57 in 2014⁵. This is supported by our findings that the percentage of patients who decided to use a non-HPCU due to “poor accessibility to HPCUs” decreased in 2014, compared to 2010.

In our study, the utilization of HPCU increased and “refusing hospice” decreased as the patients' age increased. This is in line with findings from earlier Asian studies, which reported that elderly patients were more likely to receive hospice care and preferred palliative care^{20,21}. This may be due to the fact that many Asians view aging and death in the elderly as natural processes and are more likely to receive non-invasive treatments²⁰. By contrast, older patients tend to use HPC less in Western countries²². This is because fairness and justice for the

utilization of medical resources are also emphasized for elderly patients. Thus, they are not excluded from aggressive cancer treatment²³. In addition, our study demonstrated that the use of long-term hospitals and “caregiving problems” increased with advancing age. Caregivers are in high demand for end-of-life care²⁴, especially among elderly patients with comorbidities²⁵. If there are “caregiving problems,” such as a lack of family members to provide care or financial support for hiring caregivers, it is inevitable to use long-term hospitals where the cost of caregiving is lower than that for an HPCU. The Korean government has begun providing health insurance for hiring paid caregivers in HPCUs since July 2015. Therefore, it is expected that the burden from caregiving for patients and their families in HPCUs will be reduced in the future.

In this study, 63.6% of patients and 98.2% of family caregivers were aware of the terminal illness when they were referred to the PCT. Patients aware of their terminal status among all terminal cancer patients who pass away at HPCUs has increased as years have passed in Korea, from 67.3% in 2010 to 77.6% in 2015⁵. The present study showed that patients and caregivers aware of their terminal illness were positively associated with utilization of HPCUs and less use of other general hospitals. All of the reasons for selecting non-HPCUs, except for “near death,” were related to unawareness of terminal status. These findings are in accordance with previous studies that reported patients aware of their terminal illness were more likely to use palliative care²⁶. The results support the importance of adequate disclosure of terminal illness and communication about end-of-life

care, including transition to palliative care²⁷.

“Near death” remained as a major reason for not selecting an HPCU in 2014 in comparison to 2010. This indicates that the timing of referral to the PCT is still too late in Korea, and this late referral pattern has not improved during study period. Late referrals to palliative care have a negative impact on patients, such as inadequate pain and symptom control, failure to discuss advance care planning, and increased in-hospital mortality^{28,29}. A previous study suggested that inadequate communication about preferred end-of-life care with physicians was a reason for late referrals to the palliative care unit¹². We suggest that bringing forward the timing of discussing end-of-life care and introducing HPC is necessary. Additionally, we expect that improving perceptions and knowledge of HPC through public relations and education will help reduce refusal of hospice care and promote early referral.

Although “poor accessibility to HPCUs” decreased in 2014, compared to 2010, it was higher in Chungcheong, Gyeongsang, Jeolla, Gangwon, and Jeju provinces than in metropolitan areas (Seoul, Gyeonggi). The regional disparity in HPCUs was similar to that reported in other countries^{1,30}. The number of HPCUs increased by 15 in 2014, compared to 2010; however, 10 of them were newly established in metropolitan areas⁵. Even though the number of HPCUs has increased in Korea, this uneven distribution has not yet been resolved. Active intervention from the government may be necessary in order to solve the regional imbalance in HPCUs. Possible interventions include inducing appropriate supply to meet demands and

developing a comprehensive HPC program within the community.

This study has a few limitations. First, the study was undertaken at a single institution, and thus, the findings may not be applicable to all terminal cancer patients. Second, we were not able to collect information on certain variables that could influence health care utilization, such as socioeconomic status. Third, data on place of final care or death were not available; a few of the participants could have changed their place of care after discharge. Lastly, the patients' awareness of their terminal illness was ascertained from family caregivers, and thus, there might have been some inconsistency in their actual awareness.

V. CONCLUSION

The use of HPCUs in Korea has increased between 2010 and 2014. This is likely due to the increase in the number of HPCUs and improved awareness of HPC, which have been supported by government policies. To promote HPC utilization for terminal cancer patients, it is necessary to inform patients and their caregivers of their terminal illness and prognosis, to bring forward the timing of discussing end-of-life care, and to improve regional accessibility to HPCUs. Further prospective study is needed to investigate factors related with HPC utilization among terminal cancer patients.

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ABSTRACT(IN KOREAN)

**완화의료팀 협의 진료 후
말기암환자의 의료 기관 선택 및 관련 요인**

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박소정

목적: 말기암환자와 가족에게 완화의료팀 협의 진료 후 의료 기관 선택 결과 및 관련 요인을 분석하여 말기암환자의 의료 이용 현황을 파악하고 호스피스 완화의료 이용 활성화를 위한 개선방안을 제시하고자 하였다.

방법: 후향적 의무기록 조사 연구로 2010년과 2014년에 국립암센터 완화의료팀에 상담을 위해 의뢰된 환자 1,028명의 의무기록 및 상담 기록을 조사하여 호스피스완화의료 상담 이후 선택한 의료 기관과 비 완화의료전문기관을 선택한 이유에 대해 분석하였다.

결과: 환자의 평균 나이는 61.0 ± 12.2 세였고, 55.1%가

남성이었으며 폐암 환자가 24.3%로 가장 많았다. 완화의료팀 협의 진료 후 2010년에는 44.6%, 2014년에는 53.9%의 말기암환자가 완화의료전문기관을 선택했다. 환자의 나이가 많을수록, 환자와 보호자가 말기 병식이 있을수록 완화의료전문기관을 더 이용하였다. 완화의료전문기관을 선택하지 않은 이유는 호스피스 거부가 34.9%로 가장 많았고, 34.7%가 임종임박, 17.7%가 완화의료기관의 접근성 저하, 12.7%가 간병문제였다.

결론: 말기암환자의 완화의료전문기관 이용은 증가하고 있고, 이는 정부 정책의 긍정적 효과로 추정된다. 말기암환자의 호스피스 이용 증가를 위해 end-of-life care와 호스피스 상의 시점을 앞당길 필요가 있고, 완화의료기관의 지역적 편차 해소 및 간병 지원을 위한 노력이 필요하다.

핵심되는 말 : 호스피스, 완화의료, 말기암, 돌봄장소, 의료이용, 자문