Comparison of Care Strategies and Quality of Life of Advanced Cancer Patients from Four Different Palliative Care Settings

Piyawan Pokpalagon, Somchit Hanucharurnkul, Ruth McCorkle, Tassanee Tongprateep, Autchareeya Patoomwan, Chukiat Viwatwongkasem

Abstract: The purpose of this study was to describe and compare palliative care strategies used for quality of life among Thais with advanced cancer who were receiving care from four different settings in Thailand, including: a religious organization; two community hospitals; a university hospital; and, a cancer center hospice. One hundred and eighty Thais who were diagnosed with advanced cancer and receiving treatment in one of four selected settings were recruited to complete a demographic questionnaire, a palliative care assessment form, and the Missoula-VITAS Quality of Life Index.

The results revealed that those who received palliative care in the community hospitals had a significantly higher mean score in regards to all the palliative care strategies used than those in the other settings. With respect to the non-pharmacological palliative care strategies, subjects receiving care at the religious organization (Buddhist temple) had a significantly higher mean score than those receiving care at the university hospital or cancer center hospice, while subjects receiving care at the community hospitals had significantly higher mean scores than those receiving care at the university hospital. Regarding pharmacological palliative care, subjects receiving care at the community hospital had significantly higher mean scores than subjects receiving care in all the other settings. In addition, subjects receiving care at the religious organization, university hospital, and cancer center hospice had significantly higher mean scores, with respect to overall quality of life, than those receiving care at the community hospitals. Also, subjects receiving palliative care at the religious organization, university hospital, and cancer center hospice had significantly higher well-being and transcendent mean scores than those receiving care at the community hospitals. Furthermore, the various organizations were found to be helpful to the subjects and their families, and should be supported by the healthcare policy makers.

Pacific Rim Int J Nurs Res 2012 ; 16(4) 326-342

Key Words: Levels of palliative care services; Quality of life; Advanced cancer

Introduction

Cancer is a major health problem and the leading cause of death in Thailand.[1] Individuals diagnosed with advanced stages of cancer often experience deteriorated physical and psychological health, as well as impaired social and spiritual well-being. Thus, as they deal with their illness, they often receive palliative care for: relief of their symptoms; improvement of their quality of life (QOL); and, social support.

***Correspondence to:* Piyawan Pokpalagon**, *RN, PhD (Candidate) Ramathibodi School of Nursing, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand.*
E-mail: *pokpalagon@hotmail.com*
Somchit Hanucharurnkul, *RN, PhD. Professor Emeritus, Ramathibodi School of Nursing, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand.*
Ruth McCorkle, *RN, PhD, FAAN. Professor, School of Nursing, Yale University, New Haven, CT, USA.*
Tassanee Tongprateep, *RN, DSN. Associate Professor, Kuakarun Faculty of Nursing, University of Bangkok Metropolis, Bangkok, Thailand.*
Autchareeya Patoomwan, *RN, PhD. Assistant Professor, Ramathibodi School of Nursing, Faculty of Medicine Ramathibodi Hospital, Mahidol University, Bangkok, Thailand.*
Chukiat Viwatwongkasem, *PhD. Associate Professor, Department of Biostatistics, Faculty of Public Health, Mahidol University, Bangkok, Thailand.*

Currently, 13 different organizations, throughout Thailand, provide palliative care services to patients.[2] The services are categorized according to the level of care provided, including: self-care, primary care, secondary care, and tertiary care.[3] Self-care services, usually, are provided, by non-governmental volunteers at a Buddhist temple, to individuals within a given community. Secondary care, most often, is provided by a community hospital that is responsible for providing healthcare to residents of a particular district or sub-district. Tertiary care is provided, mainly, by healthcare professionals with special expertise within university hospitals and cancer center hospices.

However, little is known about how the various settings (i.e., religious facilities, community hospitals, university hospitals and cancer center hospices) provide palliative care for individuals with advanced cancer and their families, or the outcome, in terms of QOL, of the treatment they provide. Prior studies that have been conducted, in Thailand, regarding cancer treatment, predominantly, have taken place within individual settings. Thus, a rigorous comparison of the care provided and the outcomes of that care, among settings, have not occurred. Therefore, the aim of this study was to seek an understanding about the palliative care individuals with advanced cancer receive and the QOL they experience when they receive treatment within a: religious organization; community hospital; university hospital; or, hospice.

Review of Literature

Palliative care is known to be a philosophy of care, as well as an organized, highly structured system for delivery of healthcare,[4] with a focus on promoting the best possible QOL for those facing a life-threatening illness, through optimal management of one's physical, psychosocial, emotional, and spiritual symptoms, and inclusion of family members in the delivery of care.[5, 6] In addition, the concept, palliative care, has been applied in various health care systems and viewed as being dependent on one's perceptions and understanding.[7] This is due to the fact that the application of the palliative care concept may differ in that some may emphasize only symptom management, while others may focus on the needs of the patients and their families.

Palliative care includes both pharmacological and non-pharmacological strategies in the management of symptoms and level of comfort of those with a given illness. Analgesic and adjuvant drugs are the most commonly used palliative care medications.[8, 9] Non-pharmacological palliative care strategies that have been used include: psychosocial interventions;[10] physical intervention;[11] traditional (dietary and herbal) medicines;[12, 13] and, religious and spiritual coping.[14, 15] All of these strategies are known to reduce the pain and concomitant mood disturbances being experienced, while increasing the QOL of those with advanced cancer.[14-16]

The primary goal for individuals requiring palliative care is improvement of their QOL, which may include various physical, functional, psychological, socioeconomic, and mental dimensions.[17] Measurement of one's QOL can assist in identification and categorization of patients' problems, monitoring of their clinical changes and progress regarding dimensions that contribute to their QOL,[18] and facilitation of a comprehensive evaluation of the treatments and services provided to them.[19] Thus, there appears to be a need for accurate measurement of each patient's QOL, as an outcome indicator.

There has been a recent increase in the amount of research regarding individuals' QOL, with the aim of evaluating the effectiveness of various healthcare interventions and services.[20, 21] While pharmacological interventions have been recommended and used in management of symptoms, prior studies have brought to light the effectiveness of the use of palliative drug therapy in improving individuals' QOL. These drug therapies have included use of: analgesics, cough suppressants, antiemetics, multivitamins, antiulcer agents, corticosteroids, and antibiotics.[22] In addition, non-pharmacological interventions (i.e., psycho-educational,[20] psychological,[23] cognitive,[21] emotional,[21] physical,[21, 23] social,[21, 23] and spiritual interventions)[21] have been recommended for management of symptoms and improvement of patients' QOL.[20, 21, 23]

However, limited research has been conducted, in Thailand, regarding the palliative care provided and the QOL of those with advanced cancer.[2, 7, 24, 25] Exploration of the various levels of palliative care provided, in regards to the QOL of those with advanced cancer, may help clarify issues, with respect to this life-threatening illness, as well as facilitate identification of effective palliative care strategies for this population. Therefore, the following questions were posed:

a) What palliative care strategies are used by, and the QOL of, cancer patients receiving care at different types of palliative care settings (i.e., religious [temple], community hospital, university hospital, and hospice)?

b) Are there significant differences in the palliative care strategies used by, and the QOL of, cancer patients receiving care at different types of palliative care settings (i.e., religious [temple], community hospital, university hospital, and hospice)?

Method

Design: A cross-sectional quantitative descriptive design was used.

Ethical Considerations: Prior to implementation, the study was approved by the Institutional Review Board of the primary investigator's (PI) academic institution, as well as by the administrators of the palliative care settings used as study sites. Each potential participant was informed about: the purpose of the study; what his/her involvement would entail; confidentiality and anonymity issues; voluntary involvement; and, the right to withdraw at any time without repercussions. All potential subjects who consented to participate were asked to sign a consent form.

Sample: The population under study included 1,294 Thais who had a physician's diagnosis (as recorded in their medical record), between 2005 and 2009, of stage IV cancer, and were receiving treatment to alleviate their symptoms and promote their comfort, rather than cure their illness. This advanced cancer population included: 313 reported cases, in 2009, at the selected Buddhist temple; 62 and 93 reported cases, in 2009, at the two selected community hospitals; 535 reported cases, in 2008, at the selected university hospital; and, 291 reported cases, in 2005, at the selected cancer center hospice. The sample size was determined via estimation of the population proportion from each of the selected study sites,[26] resulting in a need for 180 subjects (44 from the temple, 22 from the community hospitals, 74 from the university hospital, and 40 from the cancer center hospice).

After reviewing the available medical records, at three of the selected settings and having two APNs, at the two community hospitals, identify potential subjects, the PI purposively recruited 212 potential subjects who were: at least 18 year of age; willing to participate; able to speak, read, and write Thai; not receiving any aggressive or curative treatment; and, knowledgeable about their diagnosis. Potential subjects were excluded if they: had hematologic cancer; had a deteriorated physical status or illness; and/or, were unable to answer the questionnaires. Twenty-three (10.8%) of the 212 potential subjects elected not to take part in the study because of feeling too ill/fatigued (n = 21; 9.9%) or simply not wanting to participate (n = 2; 1%). In addition, seven (3.3%) failed to complete the questionnaire because of feeling too ill/fatigued or being transferred to another hospital (n = 2; 1%), resulting in 180 subjects completing the study.

The 180 Thais, who completed the study, ranged in age from 20 to 84 years (mean = 55.21 years) and, predominantly, were: female (n = 109; 60.6%); married (n = 126; 70.0%); Buddhist (n = 172; 95.6%); primary school graduates (n = 98; 54.4%); and, living in central Thailand (n = 85; 47.2%). Their healthcare costs were covered: by universal coverage (n = 80; 44.4%); without charge (n= 45; 25%); and/or, by government welfare (n =29; 16.1%). Sixty (33.3%) subjects worked. Their family incomes ranged from 0-1,000,000 baht per month (median and mode income = 10,000 baht per month; 32 baht = 1 USD). Although 33.3% (n = 60) of the subjects worked outside the home, less than half (n = 85; 47.2%) perceived having a sufficient income, with no savings. However, most of them (n = 179; 99.4%) had a caregiver, who was either a spouse, along with a child (n = 142; 78.9%), or a parent or sibling (n = 69; 38.3%). In addition, the majority indicated they received emotional support (n = 173; 96.1%), direct care and financial support (n = 101; 56.1%), and informational support (n = 78; 43.3%).

The subjects, predominantly, had breast cancer (n = 51; 28.3%), followed by: hepatobiliary cancer (n = 32; 17.8%); lung cancer (n = 26; 14.4%); colorectal cancer (n = 19; 10.6%); gynecology cancer (n = 17; 9.4%); head-neck cancer (n = 16; 8.9%); bladder cancer (n = 9; 5%); gastro-intestinal cancer (n = 5; 2.8%); and, osteosarcroma (n = 5; 2.8%). Their time since diagnosis ranged from 0.25 to 210 months (mode = 24 months; median = 10 months). Hypertension (n = 44; 24.4%) was the most common co-morbid disease, followed by diabetes mellitus (n = 22; 12.2%) and cardiac problems (n = 8; 4.4%). Although the majority had received previous treatment (chemotherapy [n = 114; 63.3%] or without chemotherapy [n = 29; 16.1%]), 37 (20.6%) of them had not received any treatment. They choose treatment at the: temple/religious organization, because of what they had seen in the social media (n = 19; 43.1%) and upon suggestions from others (n = 17; 38.6%); community hospitals, because of them being convenient (n = 15; 68.2%); university hospital, because of being referred (n = 16; 21.6%) or having relatives or friends working there (n = 12; 16.2%); and, hospice, because of being referred (n = 37; 92.5%). In addition, they had received treatment for 7 to 2,190 days (mean = 354 days; median = 115 days) and stated their top three concerns were: the progress of their cancer (n = 45; 25%); their pain and symptoms (n = 44; 24.4%); and, their family (n = 41; 22.8%).

Setting: The setting consisted of five purposively selected palliative care service facilities, including: a religious organization (Buddhist temple in northeastern Thailand); two community hospitals (one in northeastern Thailand and one is northern Thailand); a university hospital (in Bangkok, Thailand); and, a cancer center hospice (in central Thailand). Prior data revealed that the number of patients with advanced cancer, who were in the initially selected community hospital, was significantly less than the number of such patients who used the other study sites. Thus, a decision was made to seek subjects from two selected community hospitals. Moreover, both of the selected community hospitals had a palliative care service and an advanced practice nurse (APN) who specialized in palliative care. The settings also were selected because of the number of individuals with advanced cancer they treated.

The religious organization, located within a Buddhist temple, focused on palliative care for cancer patients, based on Buddhism and the use of herbal medicines. The organization used the Lord Buddha's teachings to enhance the patients' faith, hope, and acceptance of life in a peaceful environment. A sense of sharing and healing was evident as volunteers, patients, and families participated together in activities in a community of mutual assistance. The organization did not receive financial or manpower support from the government. However, the temple had established a foundation and received donations, including money from merit making, from Thais and others, who had faith in the Buddhist monk, Luang Ta.

The palliative care that was administered at the two community hospitals was under the leadership of APNs. The APNs administered care via: home-based interventions; prescribed medications for relief of pain and other symptoms; emotional support; and, collaboration with medical specialists.

Those who were very ill, had complex problems, or required intensive symptom management received palliative care at the university hospital. The medical specialists at the hospital provided aggressive, invasive, and curative treatment for patients' specific problems via: a pain clinic; radiation therapy; and/or, chemotherapy. Palliative care consultative services were provided by the physicians and APNs. However, the physical environment provided limited privacy and the hospital routine often did not fit with the psychological and spiritual needs of the patients and their families.

The cancer center hospice, located on a hospital ward, provided inpatient palliative care services to cancer patients in later stages of the disease. However, the hospice admitted patients only for two weeks. During that time, the patients' families stayed with the patients and were taught how to provide home care for them. The cancer center hospice had a peaceful atmosphere, was close to nature, and accommodated cooking and chanting. However, most of the patients tended to stay in bed and not participate in any activities.

Instruments: Data were collected via three instruments. They were the: Demographic Questionnaire and Medical Record Form (DQMRF); Palliative Care Assessment Form (PCAF);[9] and, Missoula-VITAS Quality of Life Index (MVQOLI).[27]

The 21-item, PI developed, Demographic Questionnaire and Medical Record Form (DQMRF) was used to obtain demographic and clinical information regarding each subject's: age; gender; hometown; religion; marital status; educational level; household income; financial status; health payments; occupational status; presence of a family caregiver; prior treatment; reason for receiving treatment at the particular setting; length of time receiving treatment; and, top three concerns. The PI also obtained information, from each subject's medical record, regarding his/her: type of cancer; length of time since diagnosis; type of treatment received; and, co-morbidity.

The Palliative Care Assessment Form (PCAF),[9] was used to obtain information about the palliative care strategies used by the subjects. The PCAF included pharmacological and non-pharmacological palliative care management strategies. The pharmacological management strategies' section consisted of the most commonly used palliative care medications. These included analgesics and adjuvant medications (i.e., opioids, other analgesics, anti-depressants, antixiolytics, and anticonvulsants), sedatives, laxatives, anti-flatulents, and antiemetics, as well as space for adding medications the subject may have taken that were not on the list. The non-pharmacological section consisted of 23 management strategies categorized into 4 groups, including: psychosocial interventions (4 items); mind-body and spiritual interventions (7 items); physical interventions (8 items); and, use of traditional medicine [herbs and diet] (4 items). Subjects were asked to respond to each item with a "yes" (currently used) or "no" (currently not used) response. Each "yes" received a score of 1, while each "no" received a score of 0. A total score was obtained for each section by summing across all responses. The higher the pharmacological score, the more medications were used. Likewise, the higher the non-pharmacological score, the more strategies were used. A total palliative care score was obtained by summing the total value from the pharmacological and non-pharmacological sections.

The 26-item Missoula-VITAS Quality of Life Index (MVQOLI)[27] was used to assess the patient-reported information regarding their QOL. Permission to use and translate the instrument was obtained from the developer of the original instrument. The *MVQOLI* was translated into Thai by two of the researchers and back translated from Thai to English by a bilingual nursing professor. The back translated version then was compared with the original English language version by a native English language professor and determined to have no changes in meaning. Three oncology and palliative care nursing instructors, an oncology APN, and a palliative care physician determined the content validity of the *MVQOLI* to be 0.94.

The 26-items were divided into six categories: overall QOL (one item) and five dimensions (25 items) regarding each respondent's QOL. The five QOL dimensions included: symptoms (five items); function (five items); interpersonal (five items); well-being (five items); and, transcendent (five items). Within each dimension, three kinds of information (assessment, evaluation, importance) were gathered from each respondent, so as to be able to illuminate their overall experience. Examples of the questions were: "How would you rate your overall quality of life (overall QOL)?"; "I feel sick all the time (symptom assessment);" "I am satisfied with the current control of my symptoms (symptom evaluation);" "Physical discomfort overshadows an opportunity for enjoyment (symptom importance);" "I am no longer able to do many of the things I like to do (function assessment);" "I accept the fact that I cannot do many of the things that I used to do (function evaluation);" "My contentment with life depends upon being active and independent in my personal care (function importance);" "I have a better sense of meaning in my life now than in the past (transcendent assessment):" "Life has lost all value for me; every day is a burden (transcendent evaluation); and, "It is important to me to feel that my life has meaning (transcendent importance)." Possible responses to the one item assessing overall QOL ranged from "worst possible" = 1 to "best possible" = 5. The other 25 items had possible responses of: a) "agree strongly" = -2 to "disagree strongly = +2 for negatively focused assessment items; b) "agree strongly" = +2 to "disagree strongly = -2 for positively focused assessment items; c) "agree strongly = +4 to "disagree strongly = -4 for positively focused evaluation items; d) "agree strongly = -4 to "disagree strongly = +4 for negatively focused evaluation items; and, e) "agree strongly = 5 to "disagree strongly = 1 for importance items. The score for overall QOL was determined by the numerical value of the respondent's response to the one overall QOL assessment item. A high score, which could range from 1 to 5, suggested a high rating of one's overall QOL. The total QOL score, obtained from the remaining 25 items was determined by calculating weighted dimension scores (i.e., summing the values of the respective scores for the assessment and evaluation questions in each of the five dimensions; dividing each of the five scores by 2; multiplying each of the five scores by the score obtained for the respective domain's importance question; summing the five dimensions scores obtained; dividing that score by 10; and, then adding 15). The total score could range from 0 to 30. The higher the score, the better the individual's QOL. The internal consistency reliability of the MVQOLI, in this study, was 0.68.

Data Collection: Potential subjects were approached, by the PI, in the in-patient department, out-patient department (OPD) clinic, and/or home care service of each of the selected settings. Once a patient consented to participate in the study, his/her medical record was reviewed for the purpose of obtaining health-care related information needed for completion of the DQMRF. The PI then administered, by reading the respective content and recording each subject's verbal responses, the demographic data portion of the DQMRF, PCAF, and MVQOLI. The instruments were administered while the subjects were either sitting in a private section of the OPD waiting room, resting in bed in the hospital or hospice center, or sitting in the home care service at the temple. It took approximately 30 to 45 minutes to complete the questionnaires. Each completed questionnaire was given a code number and placed in a locked cabinet.

Data Analysis: Descriptive statistics were used to analyze the subjects' demographics, palliative care strategies, and QOL. Analysis of variance (ANOVA) was used to compare the non-pharmacological palliative care strategies utilized, their overall and total QOL, and the symptom and function dimensions of their QOL. Welch's ANOVA was used to compare: the palliative care strategies utilized; their QOL; and, the interpersonal, well-being, and transcendent dimensions of their QOL. Kruskal-Wallis was used to compare the pharmacological palliative care strategies utilized by the subjects among the four selected palliative care settings.

Results

Palliative care: As shown in **Table 1**, pharmacological management analgesic and adjuvant drugs were used most often, followed by antiemetics, sedatives, laxatives, and anti-flatulents. The top five non-pharmacological management strategies used were: talking to someone who gave support/ encouragement; changing food/ eating behaviors; reading the Dharma book/ bible of one's own religion and making merit; getting information/advice on self-care; and, taking vitamins or dietary supplements (see **Table 2**).

Table 1 Pharmacological Management Strategies within Four Palliative Care Settings

Strategies	Religious Organization n = 44 (%)	Community Hospitals n = 22 (%)	University Hospital n = 74 (%)	Hospice Center n = 40 (%)	Total n = 180 (%)
1. Analgesics and adjuvants					70 (38.9)
Strong opioids					
Morphine sulphate tablets	0	13 (59.0)	5 (6.7)	4 (10.0)	22 (12.2)
Morphine sulphate solution	0	8 (36.4)	3 (4.1)	10 (25.0)	21 (11.7)
Kapanal	0	0	0	5 (12.5)	5 (2.8)
Morphine injection	0	0	0	1 (2.5)	1 (0.6)
Fentanyl	0	0	1 (1.4)	0	1 (0.6)
Weak opioids					
Tramal	3 (6.8)	10 (45.5)	7 (9.5)	6 (15.0)	26 (14.4)
Ultracet	0	0	3 (4.1)	0	3 (1.7)
Codeine	0	1 (4.5)	0	1 (2.5)	2 (1.1)
Tylenol with codeine	2 (4.5)	0	0	0	2 (1.1)
Non-opioids					
Paracetamal	0	3 (13.6)	11 (14.9)	3 (7.5)	17 (9.4)
Celebrex	0	0	2 (2.7)	0	2 (1.1)
Brufen	0	0	0	1 (2.5)	1 (0.6)
Naproxen	0	0	1 (1.4)	0	1 (0.6)
Diclofenac	0	0	1 (1.4)	0	1 (0.6)
Adjuvant					
Gabapentin	0	1 (4.5)	1 (1.4)	2 (5.0)	4 (2.2)

Table 1 Pharmacological Management Strategies within Four Palliative Care Setting (Continued)

Strategies	Religious Organization n = 44 (%)	Community Hospitals n = 22 (%)	University Hospital n = 74 (%)	Hospice Center n = 40 (%)	Total n = 180 (%)
2. Sedatives					48 (26.7)
Amitriptylene	11 (50.0)	1 (1.4)	10 (25.0)	22 (12.2)	22 (12.2)
Lorazepam	6 (27.3)	8 (10.8)	8 (20.0)	22 (12.2)	21 (11.7)
Ativan	1 (4.5)	1 (1.4)	3 (7.5)	5 (2.8)	5 (2.8)
Diazepam	1 (4.5)	0	1 (2.5)	2 (1.1)	1 (0.6)
Hadol	1 (4.5)	0	0	1 (0.6)	1 (0.6)
3. Laxatives					32 (17.8)
Senokort	0	2 (9.0)	9 (12.2)	4 (10.0)	15 (8.3)
Milk of Magnesia	0	8 (36.4)	1 (1.4)	5 (12.5)	14 (7.8)
Emulsion Liquid Paraffin (ELP)	0	1 (4.5)	0	1 (2.5)	2 (1.1)
- Unison enema	0	0	0	1 (2.5)	1 (0.6)
- Lactulose	0	1 (4.5)	0	0	1 (0.6)
4. Antiflatulants/relief of abdominal discomfort					
Simethicone	0	5 (22.7)	0	1 (2.5)	6 (3.3)
M. Carminative	0	1 (4.5)	0	0	1 (0.6)
Alum milk	0	1 (4.5)	0	0	1 (0.6)
5. Antiemetics					
Ondestron	0	0	37 (50.0)	7 (17.5)	44 (24.4)
Domperidone	0	4 (18.2)	15 (20.3)	15 (37.5)	34 (18.9)
Metoclopramide	0	0	14 (18.9)	3 (7.5)	17 (9.4)
Ramosetron	0	0	0	1 (2.5)	1 (0.6)

Note: A patient may have taken more than one type of medication listed.

The largest proportion of patients (n=151; 96.67%) were found to use a combination of pharmacological and non-pharmacological strategies (see **Tables 1 & 2**). Only six (3.33%) solely used non-pharmacological strategies, while none solely used pharmacological strategies.

With respect to the palliative care strategies used in each level of care, the pharmacological strategies, except for the weak opioids (Tramal and Tylenol with codeine), were used minimally at the religious organization, while they were most often used by patients from the community hospitals (see **Table 1**). With regard to the mean scores for the strategies used in each level of care, patients from the community hospitals had the highest mean scores for the pharmacological strategies used (see **Table 1**), while those from the religious organization had the highest mean scores for the non-pharmacological strategies used (see **Table 2**). In addition, as shown in Table 3, the total palliative care strategies used, non-pharmacological strategies, and pharmacological strategies were found to differ significantly among the patients from the four settings.

Using the post-hoc test, subjects from the community hospitals were found to have a significantly higher mean score for the palliative care strategies used than those from the other settings ($p < .05$). The patients from the religious organization had a significantly higher mean score for non-pharmacological palliative care strategies used than those from the university hospital and the cancer center hospice ($p < .05$). Furthermore, subjects from the community hospitals had a significantly higher mean score for non-pharmacological strategies used than those from the university hospital ($p < .05$).

Table 2 Non-pharmacological Care Strategies within Four Palliative Care Settings

Strategies	Religious Organization n = 44 (%)	Community Hospitals n = 22 (%)	University Hospital n = 74 (%)	Hospice Center n = 40 (%)	Total n = 180 (%)
Psychosocial interventions					
Getting information/ advice on self-care	28 (63.6)	21 (95.5)	54 (72.9)	33 (82.5)	136 (75.6)
Talking to someone who gave support	43 (97.7)	22 (100)	70 (94.6)	39 (97.5)	174 (96.7)
Enrolling in self-help group	0	3 (13.6)	0	0	3 (1.7)
Getting information/advice on coping skills	13 (29.5)	12 (54.5)	10 (13.5)	6 (15.0)	41 (22.8)
Mind-body/spiritual interventions					
Doing progressive muscle relaxation	10 (22.7)	10 (45.5)	23 (31.1)	17 (42.5)	60 (33.3)
Meditating	43 (97.7)	11 (50.0)	41 (55.4)	21 (52.5)	116 (64.4)
Reading Dharma book/bible of own religion and making merit	42 (95.5)	12 (54.5)	55 (74.3)	30 (75.0)	139 (77.2)
Listening to music/ music therapy	31 (70.5)	12 (54.5)	40 (54.1)	19 (47.5)	102 (56.7)
Practicing universal energy healing	2 (4.5)	0	3 (4.1)	0	5 (2.8)
Using art therapy	1 (2.3)	0	0	1 (2.5)	2 (1.1)
Using pet therapy	0	2 (9.0)	1 (1.4)	0	3 (1.7)

Table 2 Non-pharmacological Care Strategies within Four Palliative Care Settings (Continued)

Strategies	Religious Organization	Community Hospitals	University Hospital	Hospice Center	Total
	n = 44 (%)	n = 22 (%)	n = 74 (%)	n = 40 (%)	n = 180 (%)
Physical interventions (manipulation and body-based methods)					
Using exercise	32 (72.7)	6 (27.3)	34 (45.9)	18 (45.0)	90 (50.0)
Using massage or reflexology	15 (34.1)	18 (81.8)	19 (25.7)	12 (30.0)	64 (35.6)
Using acupuncture	0	1 (4.5)	4 (5.4)	0	5 (2.8)
Using hot or cold packs	6 (13.6)	3 (13.6)	10 (13.5)	5 (12.5)	24 (13.3)
Using ultrasound for pain relief	0	1 (4.5)	0	0	1 (0.6)
Using hydrotherapy	4 (9.0)	0	4 (5.4)	3 (7.5)	11 (6.1)
Using aroma therapy	4 (9.0)	0	0	0	4 (2.2)
Using transcutaneous electrical nerve stimulation	0	0	0	0	0
Traditional medicine, herbs, and diet					
Using herbs or traditional medicine	43 (97.7)	14 (63.6)	31 (41.9)	20 (50.0)	108 (60.0)
Using Ya-mhor (Thai folk medicine)	15 (34.1)	4 (18.2)	11 (14.9)	15 (37.5)	45 (25.0)
Changing food/eating behaviors	44 (100)	18 (81.8)	51 (68.9)	34 (85.0)	147 (81.7)
Taking vitamins or dietary supplements	26 (59.1)	16 (72.7)	54 (72.9)	21 (52.5)	117 (65.0)

Note: A patient might use more than one care strategy

As shown in **Table 3**, patients from the religious organization had a significantly lower mean score for pharmacological strategies used than those from the other settings. Subjects from the community hospitals had a significantly higher mean score for use of pharmacological strategies than those from the religious organization ($p = .000$), university hospital ($p = .000$), and cancer center hospice ($p = .002$). The university hospital patients had a significantly lower mean score for pharmacological strategies used than those from the community hospitals ($p = .000$) and cancer center hospice ($p = .012$), but a significantly higher mean score than subjects from the religious organization ($p = .000$).

Table 3 Comparison of Mean Scores of Care Strategies Used Within Four Palliative Care Settings (n = 180)

Care Strategies Used	Care Settings				ANOVA F/ df	Chi-square df	ANOVA Welch	*p*
	Religious Organization (n = 44) [$\bar{x}\bar{x}$ (SD)]	**Community Hospitals** (n = 22) [$\bar{x}\bar{x}$ (SD)]	**University Hospital** (n = 74) [$\bar{x}\bar{x}$ (SD)]	**Hospice Center** (n = 40) [$\bar{x}\bar{x}$ (SD)]				
Non-pharm.	9.20 (2.17)	8.45 (2.43)	6.99 (2.89)	7.35 (2.81)	7.236/ 3			.000
Pharm.	0.07 (0.25)	3.68 (1.49)	1.64 (1.29)	2.33 (1.51)		89.217/ 3		.000
Total Palliative	9.27 (2.18)	12.14 (3.06)	8.62 (3.27)	9.68 (3.74)			7.244/ 3	.000

Note: Non-pharm. = Non-pharmacological care strategies; Pharm. = Pharmacological care strategies;
Total Palliative = Total palliative care strategies

Quality of life: As shown in **Table 4**, patients from the religious organization reported the highest level in overall QOL (1 item), followed by subjects from the university hospital, cancer center hospice, and community hospitals. For total QOL, religious organization patients reported the highest mean score, followed by patients from the university hospital, cancer center hospice, and community hospitals. For each dimension of QOL, patients from the community hospitals had the highest mean scores for the symptoms and interpersonal dimensions of QOL, while subjects from the religious organization had the highest mean scores for the function, well-being, and transcendent dimensions of QOL. *S*ignificant differences were found, among subjects from the four settings of care, in overall QOL (1 item) and the well-being and transcendence dimensions of QOL. In addition, no significant differences were found, among patients from the four settings of care, regarding the mean scores for total QOL, and the symptoms, function, and interpersonal dimensions of QOL.

Table 4 Comparison of Quality of Life Dimensions Within Four Palliative Care Settings (n = 180)

QOL	Care Settings				ANOVA F-ratio/ df	ANOVA Welch	*p*
	Religious Organization (n = 44) [$\bar{x}\bar{x}$ (SD)]	**Community Hospitals** (n = 22) [$\bar{x}\bar{x}$ (SD)]	**University Hospital** (n = 74) [$\bar{x}\bar{x}$ (SD)]	**Hospice Center** (n = 40) [$\bar{x}\bar{x}$ (SD)]			
Overall QOL (1 item)	3.43 (0.70)	2.50 (0.96)	3.30 (0.70)	3.25 (0.74)	7.301/3		.000
Total QOL	18.99 (2.43)	17.61 (1.98)	18.89 (2.50)	18.23 (3.11)		2.680/3	.053
- *Symptoms*	8.18 (5.49)	8.64 (7.64)	8.59 (5.56)	7.81 (5.88)	.231/3		.874
- *Function*	8.85 (5.74)	5.14 (7.10)	8.54 (8.08)	6.51 (7.89)	1.838/3		.142
- *Interpersonal*	11.08 (7.22)	15.66 (7.41)	12.83 (8.31)	10.34 (11.31)		2.424/3	.073
- *Well-being*	2.92 (11.58)	-3.50 (8.35)	1.14 (9.59)	0.09 (11.15)		6.244/3	.001
- *Transcendent*	8.85 (9.36)	0.14 (6.74)	7.78 (10.18)	7.54 (9.91)		7.814/3	.000

Note: QOL = Quality of Life

Using the post-hoc test, subjects from the community hospitals, compared to those from the other settings, had a significantly lower mean score for overall QOL (1 item), and the well-being and transcendence dimensions of QOL ($p < .05$).

Discussion

The findings regarding pharmacologic and non-pharmacological strategies of care were congruent with prior research on patients with advanced cancer. Similar to Get-Kong's studies,[8, 9] the most common medications prescribed were analgesics (various forms of morphine followed by other analgesics) and adjuvant medications. While, similar to the work of Slevin and colleagues,[28] the most frequently used non-pharmacological strategy was talking to someone who provided support and encouragement. Different sources of support (i.e., family, friends, nurses, or doctors) often provided different types of support. However, prior research noted that talking amongst friends and family was perceived to be an effective coping strategy for 42.3% of cancer survivors.[29]

Changing foods and eating behaviors was the second most common non-pharmacological strategy used, while taking vitamins or dietary supplements was the fifth. Diets in cancer therapy tend to go from healthy alternatives to supposed cures.[30] In this study, the macrobiotic, Gerson, Cheewajit, and vegetarian diets were persistently popular examples of dietary approaches. Most of the dietary approaches tended to focus on increasing the intake of unprocessed fruits, vegetables, and whole grains, while minimizing consumption of refined foods, fat, and animal products.[31] Such diets derive 50-60% of their calories from whole grains, 25-30% from vegetables, and 10-25% from beans, seaweed, and soups. All animal meat, certain vegetables and processed foods tend to be avoided, while soybean consumption is promoted.[32] Unfortunately, subjects in the hospital settings often received dietary advice that conflicted with prior information they had received. For example, because of receiving treatments (i.e., chemotherapy and radiation therapy) that decrease the white blood cell (WBC) count, subjects in the hospitals often were advised to eat a lot of protein, so as to increase their WBC counts.

Reading the Dharma book/ bible of one's own religion and making merit was the third most commonly used non-pharmacological strategy. Spiritual and religious traditions have been found to provide understanding of the human experience of death and dying, and the meaning of illness and suffering.[33] Making merit is what Thais, who believe in the Buddhist doctrine, believe will bring them happiness, a peaceful life, and other good things. Gaining merit is believed to strengthen them to overcome any obstacles/misfortunes and help them to ascend to heaven or a peaceful place after death.[34]

Getting information/advice in self-care was the fourth most commonly used non-pharmacological strategy. It is common for cancer patients to seek information from different sources, such a health care staff member and/or individuals/organizations outside the health care system. The literature has noted that obtaining information helps cancer patients reduce anxiety, promote self-care and compliance, and gain control of their situations.[35]

Similar to a prior Thai study,[9] the subjects in this study, tended to use a combination of pharmacological and non-pharmacological strategies to deal with their illness. Moreover, the finding is similar to Australian findings regarding women with breast cancer, whereby 87.5% of them used complementary therapies, with many using four or more such therapies.[36] In addition, it is common for cancer patients to combine complementary therapies with conventional therapies.[37]

The patients being cared for by the religious organization were found to have a significantly higher mean score regarding the use of non-pharmacological palliative care strategies than subjects from the university hospital and cancer center hospice. In addition, patients from the community hospitals had a significantly higher mean score for use of non-pharmacological strategies than patients from the university hospital. Most likely this was due to the fact that the religious organization combined various methods of non-pharmacological strategies, such as Thai traditional medicines and comprehensive complementary approaches to care (i.e., meditation, chanting, herbal sauna, diet, music, humor, group support, and healing touch). On the other hand, many physicians at the university hospital were either unfamiliar with non-pharmacological care strategies or did not accept them as valid medical practices, until there was sufficient scientific research to support their use. It has been noted that the physician-patient relationship benefits from the physician being able to discuss specific complementary treatments with patients, rather than avoiding the topic, or dismissing such treatments as elusive or not part of conventional cancer care.[38]

Advanced cancer subjects from the community hospitals had a significantly higher mean score for pharmacological management strategies and a mean score for total palliative care strategies used than patients from the religious organization, university hospital, and cancer center hospice. These findings may have been due to the fact that, as a result of an increase in illness severity and subsequent pain, APNs played a key role in pain management for these patients, and had frequent and continuous contact with them regarding their care. APNs are able to perform comprehensive physical evaluations, order and interpret diagnostics, and prescribe medications. In addition, they have consistently demonstrated an ongoing commitment to care of the frail, poor, culturally diverse, and rural populations.[39] As a result, it is possible the patients from the community hospitals were provided greater accessibility to pharmacological and non-pharmacological care strategies compared to patients from the other settings.

Patients from the religious organization, compared to those from the other settings, reported the highest mean score for overall QOL (1 item), as well as the highest mean scores for total QOL and the function, well-being, and transcendent dimensions of QOL. These findings were congruent with those of a previous study wherein the spiritual support provided by the religious community and medical system was determined to be significantly associated with the patients' QOL.[40] The fact that the function dimension of QOL was higher among subjects from the religious organization, compared to those in the other settings, may have been due to the fact that these patients performed activities of daily living with only minimal to moderate assistance. In addition, they performed activities (i.e., cooking, eating, chanting, music therapy, and exercise therapy) together as a group. The fact that the well-being and transcendent dimensions of QOL, as well as overall QOL and total QOL, were higher in those from the religious organization, compared to patients from the other settings, may have been due to the type of environment that existed in the religious organization (i.e., one that allowed discussion and practice of cultural/spiritual beliefs in the context of negotiating treatment options). Being allowed and encouraged to utilize ritual ceremonies, chanting, folk medicines, and traditional therapies may have provided meaning and purpose to them regarding their lives. Religion and spirituality is known to potentially mediate QOL by enhancing one's subjective well-being through group support and coping strategies.[33]

Patients from the community hospitals had the highest mean scores for the symptoms and interpersonal dimensions of QOL compared to those from the other settings. Unfortunately, no studies could be located with which to compare these finding. The reason the mean score was high, for the symptom dimension of QOL, may have been due to the fact that the administrators of the community hospitals were aware of the importance of palliative care and the availability of APNs to provide appropriate medication for management of pain. Therefore, pharmacological strategies were readily available to the patients for reducing their discomfort and distress. Regarding the interpersonal dimension of QOL, subjects from the community hospitals had family members and friends readily available, since they were able to live at home. Thus, they were able to continue to carry on relationships and interactions with family members and friends until the end of their lives.

Patients from the community hospitals were found, compared to those from the other settings, to have a significantly lower mean score for overall QOL (1 item), as well as the well-being and transcendence dimensions of QOL. This finding was inconsistent with prior findings regarding patients who received home-based care demonstrating a higher QOL than those receiving in-patient care.[41, 42, 43] Based on the well-being and transcendence dimensions of QOL, when considering each question, it was found that patients in community hospitals, compared to those in the other settings, felt they were more: burdensome on relatives; disconnected; worried about things that were unresolved; and, worried about things getting out of control. This may have been the result of the patients from the community hospitals having, unlike those from the other settings, limited contact with other patients with incurable cancer. Those receiving care from the community hospitals were able to stay at home with their families, which limited their association with other cancer patients. On the other hand, patients from the university hospital, religious organization, and cancer center hospice were able to develop relationships with other patients with incurable cancer. Thus, they could share feelings and thoughts with one another.

Limitations and Recommendations

There are several limitations to this study that need to be considered when interpreting the results. Firstly, the *MVQOLI* dimension scores are not based on a normal distribution, thereby accounting for an increased variance with large standard deviations. The scoring of the instrument is based on a complex weighting system that increases the difficulty in the interpretation of the results. In the initial development of the *MVQOLI*, the reported reliability was based on the total score, not on individual dimensions. In this study, the reliability of the *MVQOLI* was 0.678. The reliability and validity measures of the MVQOLI continue to be refined. Secondly, a cross-sectional study, by its very nature, is limited to capturing patient changes over time in each variable. Thirdly, to conduct research in the advanced cancer population, data collection must be cautious because it is a sensitive issue to patients and their family members. Also, any study, involving a life-threatening illness population, will inevitably result in incomplete answers in questionnaires. Lastly, the use of a convenience sample limits the general applicability of the results. Random sampling could not be performed because of the limitations in patient access. There were limited cases admitted to the hospitals or the cases admitted were too severely afflicted to be involved in the study. Moreover, this study was conducted among patients with advanced cancer in four specific settings, thus, generalization to other advanced cancer patients in other settings is limited.

As a result of the study's findings and limitations, the following recommendations for future research are proposed: an intervention program, based upon the knowledge gained about effective palliative strategies, needs to be developed and tested; a situational analysis of palliative care models for advanced cancer patients, in various care settings in Thailand, should be carried out; a QOL instrument for advanced cancer patients, within the context of the Thai culture, should be developed and tested; and, a qualitative study to examine human responses to terminal illness and care needs, among both advanced cancer patients and their families, needs to be conducted.

Acknowledgements

The authors gratefully acknowledge the support provided by the Commission on Higher Education, Faculty of Medicine Ramathibodi Hospital, and the Thailand Nursing and Midwifery Council.

References

1. Ministry of Public Health, Thailand. Public Health Statistics 2010. Bangkok, Thailand: Bureau of Policy and Strategy; 2010: p. 226.
2. Wright M, Hamzah E, Phungrassami T, Bausa-Claudio A. Hospice and palliative care in Southeast Asia: A review of developments and challenges in Malaysia, Thailand, and the Philippines. Oxford, England: Oxford University Press; 2010.
3. Ministry of Public Health, Thailand. Thailand Health Profile 1999 – 2000. 2000 [cited 2010 Feb 20]; Available from: http://www.moph.go.th/ops/thealth_44/index_eng.htm.
4. National Consensus Project for Quality Palliative Care. What is palliative care? 2004 [cited 2009 Apr 22]; Available from: http://www.nationalconsensusproject.org/DisplayPage.aspx?Title=What Is Palliative Care?
5. Newton S, Hickey M., Marrs, J. Mosby's Oncology nursing advisor: A comprehensive guide to clinical practice. St. Louis (MO): Mosby; 2009.
6. World Health Organization. National cancer control programmes: Policies and managerial guidelines. 2nd ed. Geneva, Switzerland: World Health Organization, 2002.
7. Wisesrith W, Khungern J. The situational analysis of palliative care in Thailand. The 18th International Nursing Research Congress Focusing on Evidence-Based Practice, Bangkok, Thailand, 2007.
8. Riechelmann RP, Krzyzanowska MK, O'Carroll A, Zimmermann C. Symptom and medication profiles among cancer patients attending a palliative care clinic. Support Care Cancer. 2007; 15(12): 1407-12.
9. Get-Kong S, Hanucharurnkul S, McCorkle R, Viwatwongkasem C, Junda T, Ittichaikulthol W. Symptom experience, palliative care, and spiritual well-being among Thais with advanced cancer. Pacific Rim Int J Nurs Res. 2010; 14(3): 219-23.
10. Uitterhoeve RJ, Vernooy M, Litjens M, Potting K, Bensing J, De Mulder P, *et al*. Psychosocial interventions for patients with advanced cancer – a systematic review of the literature. Br J Cancer. 2004; 91(6): 1050-62.
11. Soden K, Vincent K, Craske S, Lucas C, Ashley S. A randomized controlled trial of aromatherapy massage in a hospice setting. Palliat Med. 2004; 18(2): 87-92.
12. Hopkinson J, Corner J. Helping patients with advanced cancer live with concerns about eating: A challenge for palliative care professionals. J Pain Symptom Manage. 2006; 31(4): 293-305.
13. Ravasco P, Monteiro-Grillo I, Vidal PM, Camilo ME. Dietary counseling improves patient outcomes: A prospective, randomized, controlled trial in colorectal cancer patients undergoing radiotherapy. J Clin Oncol. 2005; 23(7): 1431-8.
14. Carlson LE, Speca M, Patel KD, Goodey E. Mindfulness-based stress reduction in relation to quality of life, mood, symptoms of stress, and immune parameters in breast and prostate cancer outpatients. Psychosom Med. 2003;65(4): 571-81.
15. Tarakeshwar N, Vanderwerker LC, Paulk E, Pearce MJ, Kasl SV, Prigerson HG. Religious coping is associated with the quality of life of patients with advanced cancer. J Palliat Med. 2006; 9(3): 646-57.
16. Pujol LA, Monti DA. Managing cancer pain with nonpharmacologic and complementary therapies. J Am Osteopath Associ. 2007; 107(12 Suppl 7):ES15-21.
17. Vallerand AH, Payne, J.K. . Theories and conceptual models to guide quality of life related research. In: King CR, Hinds, PS, editors. Quality of life: From nursing and patient perspectives, 2nd ed. Boston (MA): Jones and Bartlett.; 2003. p. 45-64.
18. Lo RSK. Quality of life in palliative care patients: A multi-centre study of profile, determinants, and longitudinal changes from inpatient admission to death [dissertation]. Hong Kong, Hong Kong: Univ. of Hong Kong, 2002.
19. Wiffen P. Evidence-based care at the end of life. Palliat Med. 1998; 12(1): 1-3.
20. Bakitas M, Lyons KD, Hegel MT, Balan S, Brokaw FC, Seville J, *et al*. Effects of a palliative care intervention on clinical outcomes in patients with advanced cancer: The Project ENABLE II randomized controlled trial. JAMA. 2009;302(7): 741-9.

21. Rummans TA, Clark MM, Sloan JA, Frost MH, Bostwick JM, Atherton PJ, *et al.* Impacting quality of life for patients with advanced cancer with a structured multidisciplinary intervention: A randomized controlled trial. J Clin Oncol. 2006; 24(4): 635-42.
22. Bisht M, Bist SS, Dhasmana DC, Saini S. Effect of palliative drug therapy on quality of life in advanced head and neck cancer patients. Indian J Otolaryngol Head Neck Surg. 2011; 63(3): 220-2.
23. Can G, Erol O, Aydiner A, Topuz E. Non-pharmacological interventions used by cancer patients during chemotherapy in Turkey. Eur J Oncol Nurs. 2011; 15(2): 178-84.
24. Matchim Y, Aud M. Hospice care: A cross-cultural comparison between the United States and Thailand. J Hosp Palliat Nurs. 2009; 11(5): 262-8.
25. Nilmanat K, Phungrassami T. Status of end of life care in Thailand. UICC World Cancer Congress 2006: Transforming Knowledge into Action, July 8-12; Washington DC, USA; 2006.
26. Viwatwongkasem C. Sample size determination for research. Thai J Health Res. 1994; 8(2): 121-46.
27. Byock IR, Merriman MP. Measuring quality of life for patients with terminal illness: The Missoula-VITAS quality of life index. Palliat Med. 1998; 12(4): 231-44.
28. Slevin ML, Nichols SE, Downer SM, Wilson P, Lister TA, Arnott S, *et al.* Emotional support for cancer patients: What do patients really want? Br J Cancer. 1996; 74(8): 1275-9.
29. Halstead MT, Fernsler JI. Coping strategies of long-term cancer survivors. Cancer Nurs. 1994; 17(2): 94-100.
30. Prevost V, Grach MC. Nutritional support and quality of life in cancer patients undergoing palliative care. Eur J Cancer Care. 2012; 21(5): 581-90.
31. Place J. Complementary and alternative medicine in cancer care. In: Kogut VJ, Luthringer, SL, editos. Nutritional issues in cancer care. Pittsburgh (PA): Oncology Nursing Society; 2005.
32. Cassileth BR, Deng G. Complementary and alternative approaches. In: Berger AM, Shuster JL, VonRoenn JH, editosr. Principles and practice of palliative care and supportive oncology. 3rd ed. Philadelphia (PA): Lippincott, Williams & Wilkins, 2007.
33. Daaleman TP, VandeCreek L. Placing religion and spirituality in end-of-life care. JAMA. 2000; 284(19): 2514-7.
34. Manowongsa A. Tradition of making merit. 2003 [cited 2012 Jan 23]; Available from: http://www.thaifolk.com/doc/tumbun_e.htm.
35. Mills ME, Sullivan K. The importance of information giving for patients newly diagnosed with cancer: A review of the literature. J Clini Nurs. 1999; 8(6): 631-42.
36. Kremser T, Evans A, Moore A, Luxford K, Begbie S, Bensoussan A, *et al.* Use of complementary therapies by Australian women with breast cancer. Breast. 2008; 17(4): 387-94.
37. Richardson MA, Sanders T, Palmer JL, Greisinger A, Singletary SE. Complementary/alternative medicine use in a comprehensive cancer center and the implications for oncology. J Clin Oncol. 2000; 18(13): 2505-14.
38. Monti DA, Yang J. Complementary medicine in chronic cancer care. Semin Oncol. 2005; 32(2): 225-31.
39. Kuebler, K. K. (2003). The palliative care advanced practice nurse. J Palliat Med, *6*(5), 707-714.
40. Balboni TA, Vanderwerker LC, Block SD, Paulk ME, Lathan CS, Peteet JR, et al. Religiousness and spiritual support among advanced cancer patients and associations with end-of-life treatment preferences and quality of life. J Clin Oncol. 2007; 25(5): 555-60.
41. McMillan SC. The quality of life of patients with cancer receiving hospice care. Oncol Nurs Forum. 1996; 23(8): 1221-8.
42. Ventafridda V, De Conno F, Vigano A, Ripamonti C, Gallucci M, Gamba A. Comparison of home and hospital care of advanced cancer patients. Tumori. 1989; 75(6): 619-25.
43. Peters L, Sellick K. Quality of life of cancer patients receiving inpatient and home-based palliative care. J Adv Nurs. 2006; 53(5): 524-33.

เปรียบเทียบวิธีการดูแล และคุณภาพชีวิตของผู้ป่วยมะเร็งระยะลุกลามที่ได้รับการดูแลแบบประคับประคองในสี่ระดับของการดูแลที่แตกต่างกัน

ปิยะวรรณ โภคพลากรณ์, สมจิต หนุเจริญกุล, Ruth McCorkle, ทัศนีย์ ทองประทีป, อัจฉริยา ปทุมวัน, ชูเกียรติ วิวัฒน์วงศ์เกษม

บทคัดย่อ : การศึกษาในครั้งนี้มีวัตถุประสงค์เพื่อบรรยายและเปรียบเทียบความแตกต่างของการดูแลแบบประคับประคอง และคุณภาพชีวิตของผู้ป่วยมะเร็งระยะลุกลามที่ได้รับการดูแลในสี่ระดับของ การดูแล คือ องค์กรทางศาสนา โรงพยาบาลชุมชน 2 แห่ง โรงพยาบาลมหาวิทยาลัย และศูนย์มะเร็งฮอสพิซ กลุ่มตัวอย่างเป็นผู้ป่วยมะเร็งระยะลุกลามจำนวน 180 คนที่เข้ารับการรักษาและติดตามผลใน 4 องค์กรข้างต้น และมีคุณสมบัติตามเกณฑ์ที่กำหนด เก็บข้อมูลโดยใช้แบบบันทึกข้อมูลส่วนบุคคล แบบประเมินการดูแลแบบประคับประคอง และแบบวัดคุณภาพชีวิต

ผลการศึกษาพบว่าผู้ป่วยมะเร็งระยะลุกลามในโรงพยาบาลชุมชนมีการใช้การดูแลแบบประคับประคองสูงกว่าผู้ป่วยมะเร็งระยะลุกลามในที่อื่นๆอย่างมีนัยสำคัญทางสถิติ สำหรับการดูแลแบบประคับประคองแบบไม่ใช้ยาผู้ป่วยมะเร็งระยะลุกลามในองค์กรทางศาสนามีการใช้ที่สูงกว่าผู้ป่วยมะเร็งระยะลุกลามในโรงพยาบาลมหาวิทยาลัยและศูนย์มะเร็งฮอสพิซ ในขณะที่ผู้ป่วยมะเร็งระยะลุกลามในโรงพยาบาลชุมชนมีการใช้การดูแลแบบประคับประคองแบบไม่ใช้ยาสูงกว่าผู้ป่วยมะเร็งระยะลุกลามในโรงพยาบาลมหาวิทยาลัยอย่างมีนัยสำคัญทางสถิติ สำหรับการดูแลแบบประคับประคองแบบใช้ยาผู้ป่วยที่ได้รับการดูแลในโรงพยาบาลชุมชนมีการใช้ยาสูงกว่าผู้ป่วยมะเร็งระยะลุกลามในที่อื่นๆ อย่างมีนัยสำคัญ

สำหรับคุณภาพชีวิตโดยรวมผู้ป่วยมะเร็งระยะลุกลามในองค์กรทางศาสนา โรงพยาบาลมหาวิทยาลัยและศูนย์มะเร็งฮอสพิซมีคะแนนเฉลี่ยสูงกว่าผู้ป่วยในโรงพยาบาลชุมชนอย่างมีนัยสำคัญทางสถิติ เมื่อพิจารณาในแต่ละด้านของคุณภาพชีวิตพบว่าผู้ป่วยในองค์กรทางศาสนา โรงพยาบาลมหาวิทยาลัย และศูนย์มะเร็งฮอสพิซมีคะแนนเฉลี่ยของด้านความผาสุกและภาวะเหนืออัตตาสูงกว่าผู้ป่วยในโรงพยาบาลชุมชนอย่างมีนัยสำคัญทางสถิติ

องค์กรต่างๆมีประโยชน์ในแต่ละแง่มุมสำหรับผู้ป่วยมะเร็งระยะลุกลามและครอบครัวซึ่งควรจะได้รับการสนับสนุนจากผู้กำหนดนโยบายด้านสุขภาพ

Pacific Rim Int J Nurs Res 2012 ; 16(4) 326-342

คำสำคัญ: ระดับของการดูแลแบบประคับประคอง; คุณภาพชีวิต; มะเร็งระยะลุกลาม

***ติดต่อที่: ปิยะวรรณ โภคพลากรณ์**, RN, PhD (Candidate) นักศึกษาปริญญาเอก โรงเรียนพยาบาลรามาธิบดี คณะแพทยศาสตร์โรงพยาบาลรามาธิบดี มหาวิทยาลัยมหิดล ประเทศไทย **E-mail:** pokpalagon@hotmail.com*
***สมจิต หนุเจริญกุล**, RN, PhD. ศาสตราจารย์เกียรติคุณ โรงเรียนพยาบาลรามาธิบดี คณะแพทยศาสตร์โรงพยาบาลรามาธิบดี มหาวิทยาลัยมหิดล ประเทศไทย*
***Ruth McCorkle**, RN, PhD, FAAN. Professor, School of Nursing, Yale University, New Haven, CT, USA.*
***ทัศนีย์ ทองประทีป**, RN, DSN. รองศาสตราจารย์ คณะพยาบาลศาสตร์เกื้อการุณย์ มหาวิทยาลัยกรุงเทพมหานคร ประเทศไทย*
***อัจฉริยา ปทุมวัน**, RN, PhD. ผู้ช่วยศาสตราจารย์ โรงเรียนพยาบาลรามาธิบดี คณะแพทยศาสตร์โรงพยาบาลรามาธิบดี มหาวิทยาลัยมหิดล ประเทศไทย*
***ชูเกียรติ วิวัฒน์วงศ์เกษม**, PhD. รองศาสตราจารย์ ภาควิชาชีวสถิติ คณะสาธารณสุขศาสตร์ มหาวิทยาลัยมหิดล ประเทศไทย*