Access to palliative care in a tertiary care hospital in Thailand

ORIGINAL ARTICLE

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ABSTRACT

OBJECTIVE

To evaluate the access to palliative care in a hospitalized patients in tertiary care hospital.

METHODS

The retrospective chart review was conducted. All medical records of hospitalized patients were surveyed during January 2019. The survey excluded the medical records of pediatrics, obstetrics and postpartum care, psychiatric, and intensive care unit. When the condition of patients was met criterion of SPICT™(2017), their medical records were verified and reviewed.

RESULTS

There were 1,005 patients admitted to the hospital during the study period. Of these, 215 patients (21.4%) met the Gold Standard Framework of National Health Institute of Scotland, SPICT™ 2017 which should be eligible for palliative care; however, only 13 had consultation with for palliative care while 202 did not. The main primary disease in palliative cases was malignancy while 34.7% of those without consultation for palliative care did not have cancer.

CONCLUSION

Palliative care service in this tertiary care hospital in Thailand was relatively low. A larger study investigating the rate of access to the system to represent Thai palliative care is needed.

INTRODUCTION

The leading causes of death in Thailand are malignancy, AIDS, traffic accident, and cardiovascular disease respectively and the aged population in Thailand also has been increasing.[1] World health organization (WHO) estimates 66% of the world population would be more non-communicable disease and need palliative care.[2] Palliative care helps to prevent medical futility, decreases the suffering of patients and family and burden of disease. The health care cost in the last year of life in the United States is the highest of overall cost, 26–30%.[3-4] In Thailand, similar to the US, the health care cost in the last year of life is about 21%. Most of the cost is transportation cost to access analgesic agents at a tertiary hospital; it is about 31-86% of all cost, which causes a financial burden on the patient.[5] On the other hand, palliative care decreases endotracheal tube intubation and saves the cost of hospitalization 16,669 Baths per person.[6]

By using a criterion of Gold Standard Framework of the United Kingdom to identify palliative patient, the point-prevalence of palliative cases at acute care hospital in each country was 13% in France,[7] 9.4% in Belgium,[8] 16.6% in South Africa,[9] 19.8% in New Zealand,[10] and 36% in the United Kingdom.[11] At Songkhanagarind Hospital, a tertiary care hospital in Thailand, the rate of access to the palliative care using the diagnosis code according to the International Statistical Classification of Diseases and Related Health Problems 10th (ICD-10) from medical records between 2012 and 2016 was as low as 0.2%.[12] This is the example of less acknowledgement of palliative care, inadequate palliative care professionals and poor access to palliative care service in Thailand. The study aimed to evaluate the rate of access to palliative care in a large public tertiary hospital in northeastern Thailand to portray an access to palliative care in Thailand.

METHODS

DESIGN AND PATEINTS

A retrospective medical record review was conducted at Maharat Nakhon Ratchasima Hospital, Thailand. It is the largest tertiary care hospital under the Ministry of Public Health in the country. All medical records of hospitalized patients in the last week of January 2019 were reviewed. Those who met the criterion of Gold Standard Framework of National Health Institute of Scotland, SPICT™ 2017, their data would be further collected and analyzed. This study excluded the medical records from the intensive care unit (ICU), pediatric ward, obstetric and post-partum ward, and the psychiatric ward. The collectors were palliative doctors, internists and family medicine residents, who trained and well understood in the SPICT™.

DATA COLLECTION

The collected data included general characteristics such as age, gender, health insurance and admission department. The conditions and given treatments of the patients were documented in detail such as primary disease, comorbidity, unexpected visit or admission, WHO performance status, cognitive function, physical symptoms (e.g., pain, dyspnea), pain medications, consultations, medical procedure, treatment during hospitalization, advance care plan and length of hospital stay.

Table 1. Characteristics of the patients.

Characteristic	Consultation for palliative care (N=13)	No Consultation for palliative care (N=202)	P Value
Female–no. (%)	8 (62)	100 (49.5)	0.400
Age–yr	58.5±14.2	59.2±16.0	0.865
Age group–no. (%)			0.177
<60 years	9 (69)	107 (53.0)	
60–70 years	0	43 (21.3)	
>70 years	4 (31)	52 (25.7)	
Health insurance scheme–no. (%)			0.831
Universal coverage	10 (77)	168 (83.2)	
Civil servant medical benefit scheme	2 (15)	21 (10.4)	
Social security scheme	1 (8)	13 (6.4)	
Department–no. (%)			0.046
Surgery	1 (8)	71 (35.2)	
Medicine	8 (62)	52 (25.7)	
Gynecology	2 (15)	30 (14.9)	
Orthopaedics	2 (15)	28 (13.9)	
Ears, Nose and Throat	0	21 (10.4)	
Cancer as primary diagnosis–no. (%)	13 (100)	132 (65.4)	0.000
Number of unplanned visit within 6 months	1.2±0.3	1.6±0.1	0.535
Performance status–no. (%)			0.228
Normal	4 (31)	82 (40.6)	
Light activity	1 (8)	31 (15.4)	
<50% on bed	1 (8)	13 (6.4)	
>50% on bed	4 (31)	20 (9.9)	
On bed all the time	3 (23)	56 (27.7)	
Cognitive status–no. (%)			0.530
Impairment	3 (23)	26 (12.9)	
No response	0	4 (2.0)	

Plus minus values are mean±SD

STATISTICAL ANALYSIS

The data were summarized using descriptive statistics in terms of number, percentage, mean and standard deviation. For inferential statistics, chi-square, Fisher's exact, t-test and logistic regression were used to analyze comparing between groups of consultation and no consultation for palliative care.

RESULTS

There were 1,005 patients admitted to the hospital during the study period. Of these, 215 patients (21.4%) met the Gold Standard Framework of National Health Institute of Scotland, SPICT™ 2017 which should be eligible for palliative care; however, only 13 had consultation with for palliative care while 202 did not.

Of those 215, their mean age was 59.2 years with the relative equal number of men and women. Most of them were admitted to the Department of Surgery (33%), Internal Medicine (27.9%), and Gynecology (14.9%). Two-third (67.4%) were under the universal coverage health scheme. About 60% could do the daily living activities independently. There was only 13 (6.1%) had consulted for palliative care specialists (Table 1). The main primary disease in palliative cases was malignancy (67.4%); gastrointestinal cancer (17.7%), head and neck cancer (13%), gynecologic cancer (12.1%), hematologic cancer (7%), and lung cancer (6.5%) (Table 2).

Of 13 with consultation for palliative care, they all had cancer (Table 2), while 34.7% of those without consultation for palliative care did not have cancer; dementia and frailty (31.4%), neurological disease and head injury (25.7%), kidney disease (18.6%), stroke (17.1%), cardiovascular disease (4.3%), pulmonary disease (4.3%) and liver disease (1.4%).

Table 2. Types of cancer

Type of cancer	Consultation for palliative care (N=13)	No Consultation for palliative care (N=132)
Gastrointestine	0	38
Head&Neck	1	27
Gynecology	2	24
Blood	2	13
Lung	6	8
Breast	1	5
Liver	0	4
Uro-genital system	0	8
Others	1	5

The palliative patients reported having unsatisfied symptoms 50.2%, pain 58.6%, dyspnea 35.8%, and gastrointestinal disturbance 32.6% (Table 3). The medical procedure and device, which patients received during hospitalization, were antibiotic administration (48.8%), nasogastric tube insertion (31.2%), chemotherapy (29.3%), endotracheal tube intubation (20.0%) and on ventilator (18.1%) respectively. Unfortunately, 42.8% of palliative patients had not been prescribed any analgesic for their pain. Doctors usually prescribed non-opioids (33.0%), weak opioids (25.1%), strong opioids (19.5%) and other medications (10.7%) for relieving pain. Only 16.3% had an advance care plan. The mean length of stay was 16.1 days.

Table 3. Symptoms and treatments in palliative patients.

Symptom and treatment	Consultation for palliative care (N=13)	No Consultation for palliative care (N=202)	P Value
Symptom			
Pain	12 (92)	114 (56.4)	0.008
Dyspnea	7 (54)	70 (34.7)	0.338
Gastrointestinal symptom	6 (46)	64 (31.7)	0.464
Analgesic treatment			
No analgesics	1 (8)	91 (45.1)	0.008
Non opioids	4 (31)	67 (33.2)	1.000
Weak opioids	7 (54)	47 (23.3)	0.021
Strong opioids	5 (38)	37 (18.3)	0.278
Other medications	2 (15)	21 (10.4)	0.165
Symptom management	11 (85)	97 (48.0)	0.108
Advance care plan	8 (62)	27 (13.4)	0.000
Medical procedure			
Nasogastric tube insertion	3 (23)	64 (31.7)	0.759
Endotracheal tube intubation	1 (8)	42 (20.79)	0.473
Ventilator	1 (8)	38 (18.81)	0.471
Inotropic agent	1 (8)	11 (5.45)	0.537
Total parenteral nutrition/blenderized diet	4 (31)	25 (12.4)	0.080
Antibiotics	7 (54)	98 (48.5)	0.780
Chemotherapy	2 (15)	61 (30.2)	0.354
Palliative surgery	2 (15)	17 (8.4)	0.322
Radiotherapy	2 (15)	32 (15.8)	1.000
Renal replacement therapy	0	12 (5.9)	1.000
Length of stay–days	11.5 ±(9.3)	16.4±29.8	0.556

Plus minus values are mean±SD

Table 4. Given treatments and procedures

Procedure	Consultation for palliative care (N=12)	No Consultation for palliative care (N=114)	P Value
Pain			
Pain record	8 (67)	67 (58.8)	0.784
No analgesics	1 (8)	17 (14.9)	1.000
Strong Opioids	4 (33)	35 (30.7)	1.000
Dyspnea			
Endotracheal tube intubation	1 (14)	31 (44.3)	0.229
Ventilator	1 (14)	30 (42.9)	0.231
Strong opioids	4 (57)	13 (18.6)	0.039

Nearly three quarters of them stayed in the hospital less than 2 weeks. Comparing between those with and without consultation for palliative care, pain was more common in the former group (P=0.008) and analgesic treatment was also more common in the former group; weak opioids prescription (P=0.021).

Furthermore, the subgroup analysis was done in aspect of pain and dyspnea comparing between those with and without consultation for palliative care (Table 4), only strong opioids for relieving dyspnea were more common in the former group (P=0.039).

DISCUSSION

The rate those eligible for palliative care in Maharat Nakhonratchasima Hospital was found to be 21.4% in our study. However, very few were sent for palliative care consultation. The rate was relatively similar to that of the previous study (19.6%) at Karunrak palliative care center in another tertiary hospital in northeastern Thailand.[13] The limitation of the present study was that the Thai prevalence regarding palliative care was still not be able to identify due to the fact that we conducted the study in only one hospital. Thus, the figure cannot be comparable with that found in other countries; ranging from around 10% to 36% in France, Belgium, South Africa, New Zealand, and the United Kingdom.[7-12] The access rate to palliative care was found to be only 6.1%, comparing to that of the previous studies at Karunrak center (17.3%)[14] and at Songkhanagarind (0.2%).[12]

In the present study, the common symptoms in palliative cases were as same as the other studies including pain, dyspnea and GI disturbance.[13,15] The proper treatment especially pain and dyspnea control, advance care plan was less than the previous studies.[12,14] However, the patients who received palliative care showed less to have medical procedures, more pain control, having more opportunity to discuss their advance care plan with health care professionals, even though there was no statistically significant difference, but these were relevant with other studies about less medical futility when using

palliative care approach.[16-17] This study excluded medical records from ICU and pediatric ward and the period of the study was only one week, a larger and more representative study for Thai situation regarding palliative care should be conducted.

In conclusion, access to palliative care services in this tertiary care hospital in northeastern Thailand showed less accessibility. Inadequate palliative care delivery especially symptom management and discussing advance care plan were also observed. A larger and longer survey should be conducted.

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