นิพนธ์ต้นฉบับ

ทัศนคติ ความพึงพอใจ ความเครียด ความมั่นใจ องค์ความรู้ ทักษะ และการศึกษาด้านการดูแลประคับประคองของผู้ให้การดูแลด้านประคับประคองในโรงพยาบาลตติยภูมิของประเทศไทย

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บทคัดย่อ

ที่มา: การดูแลแบบประคับประคอง (palliative care, PC) เป็นส่วนหนึ่งของระบบการดูแลสุขภาพ และแผนการพัฒนาระบบสุขภาพของประเทศไทย บุคลากร PC เผชิญกับความท้าทายมากมายในการปฏิบัติงาน องค์ความรู้ ทัศนะคติ และการศึกษา เป็นปัจจัยสำคัญที่ทำให้ผู้ปฏิบัติงานยังคงอยู่ในระบบสุขภาพ ผู้วิจัยประสงค์ประเมินปัจจัยเหล่านี้ของผู้ปฏิบัติงาน PC ในโรงพยาบาลตติยภูมิทั่วประเทศไทย

แบบวิจัย: การสำรวจภาคตัดขวาง (cross-sectional survey)

วัสดุและวิธีการ: ผู้วิจัยส่งแบบสอบถามไปยังหน่วยบริการ PC ของโรงพยาบาลตติยภูมิ 120 แห่ง แบบสอบถามประกอบด้วยองค์ความรู้ ทัศนคติ ความพึงพอใจ ความเครียด ความก้าวหน้าในวิชาชีพ ความมั่นใจ ทักษะปฏิบัติงาน และการศึกษา

ผลการศึกษา: อัตราตอบกลับ 79.38%(381/480) เป็นพยาบาล 258 คน แพทย์ 110 คน ประมาณร้อยละ 40 ของแพทย์ผ่านการอบรม PC ระยะสั้น ภาพรวมคะแนนเฉลี่ยด้านทัศนคติ ความพึงพอใจ และความมั่นใจในการปฏิบัติงานของทุกวิชาชีพมากกว่า 3/5 การศึกษาด้าน PC และประสบการณ์ทำงาน PC มีความสัมพันธ์กับระดับทัศนคติ p = 0.012, 0.003 ตามลำดับคะแนนเฉลี่ยความพึงพอใจน้อยที่สุดคือ อัตรากำลังบุคลากร PC (2.81±0.97) และโอกาสก้าวหน้าในวิชาชีพ (2.80±1.03)

สรุป: ทัศนคติ องค์ความรู้ และทักษะของผู้ปฏิบัติงาน PC ในโรงพยาบาลตติยภูมิอยู่ในเกณฑ์ดี ยังขาดแคลนอัตรากำลัง การอบรม PC และความก้าวหน้าในวิชาชีพ สิ่งเหล่านี้ควรได้รับการสนับสนุนจาก ภาครัฐ กระทรวงสาธารณสุข และผู้กำหนดนโยบาย

คำสำคัญ: ทัศนคติ องค์ความรู้ ทักษะ การศึกษา ทีมประคับประคองโรงพยาบาลตติยภูมิในประเทศไทย

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ORIGINAL ARTICLE

Knowledge, Attitude, and Education of Palliative Care Providers in Tertiary Hospitals Across Thailand

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ABSTRACT

Background: Palliative care (PC) is a part of the healthcare system and public health service plan of Thailand. PC personnel face numerous challenges in their work. Knowledge, attitude, and education are essential for providers to remain in the public health system. The authors aimed to explore these factors in PC providers in tertiary hospitals across Thailand.

Design: Cross-sectional survey

Methods: The authors sent the questionnaires to all PC units in 120 tertiary hospitals, which contained domains of knowledge, attitude, satisfaction, stress in the workplace, career advancement, practice confidence, skills, and education.

Results: The response rate was 79.38% (381/480), 258 were nurses and 110 were doctors. Nearly 40% of doctors received short PC training programs. The attitude, satisfaction, and working confidence among all professional's overall mean scores were over 3/5. PC education and PC experience were related to attitude level, P = 0.012, and 0.003, respectively. The lowest mean scores of satisfaction were PC workforce (2.81 ± 0.97) and progression in career paths (2.80 ± 1.03).

Conclusions: Overall attitude, knowledge, and skills of Thai PC providers in tertiary hospitals are at a good level. The number of PC staff, PC education, and career advancement are currently insufficient. These three areas should receive more support from the government, the Ministry of Public Health, and policymakers.

Keywords: attitude, knowledge, skill, education, palliative care providers in tertiary hospitals in Thailand

Introduction

Palliative care (PC) is one of the most important parts of the integrative healthcare system and focuses on relieving multi-dimensional suffering including physical, psychological, social, or spiritual symptoms, relating to cardiovascular conditions, advanced cancer, major organ failure, acute trauma, and other terminal illnesses.[1] Many pieces of evidence highlight the benefit of palliative care for patients, and families, within the healthcare system. Health care costs are reduced despite patients dying in hospitals, or being discharged with PC home care.[2] PC reduces in-patient hospital costs by 9-25 percent, reduces the length of hospital stay,[3] reduces re-admission rates,[4] and reduces intensive care unit (ICU) admissions.[5] Satisfaction and quality of end-of-life care are improved with palliative care service inclusion.[6] PC home care is proven to lead to cost reductions,[7,8] reduce unnecessary Emergency Department visits, and readmissions and diminish length of stays.[9]

Palliative care in Thailand was established in the late 1990s and slowly developed in the first ten years.[10] In 2012, Temsak Phungrassami launched the Palliative Care Personnel and Services: A National Survey, which indicated that the number of trained, specialist medical providers was insufficient. At that time, only 12 doctors were trained for a year. Six doctors and 49 nurses were also trained for months. Most of the trained doctors were in medical school hospitals.[11] Presently palliative care units are located in most hospitals. Palliative care is part of the national public health service strategic plan and is included in universal health coverage.[12] However, the current structure for career paths and working positions for medical personnel in PC is uncertain. Palliative care encompasses patient and family care, holistic and complex care.[13, 14] Palliative personnel face numerous challenges and dilemmas, including medical ethics, moral distress, stressful work conditions, burden-burn out, myths, and misunderstandings about PC from patients' families and colleagues.[15-19] Knowledge, attitude, satisfaction, stress in the workplace, career advancement, practice confidence, and skills are key factors to retain providers in the government public health care system.[20-23] Different articles focused on knowledge, attitude, and practice toward Palliative care in many areas of medical fields internationally.[20,21,23-32] However, no article addressed specifically PC knowledge, attitude, and practice in PC Providers, especially within Thailand. This is the first survey to evaluate knowledge, attitude, satisfaction, and stress in the workplace, career advancement, practice confidence, skill, and PC education in Thai PC medical providers.

Methods

Design

This is a cross-sectional paper-based survey, which was sent to all palliative care units in tertiary regional hospitals and general hospitals all over Thailand. The questionnaire was sent by post on 2 July 2021 and responses were collected until 31 August 2021.

Participants

The questionnaires were sent to 120 palliative care units in tertiary hospitals across Thailand. Each unit received four copies of the survey and distributed them to four health providers which could be doctors, nurses, pharmacists, or other palliative care multidisciplinary providers. The survey was filled out anonymously and returned to the authors within two months.

Questionnaire development

Literature on 'palliative care knowledge and skill level of medical practitioner surveys' was searched in PubMed, Google Scholar, and Thaijo in English and Thai. We developed the questionnaire with two expert palliative care physicians and an expert palliative care nurse, with more than ten years of specialist experience. The content validation score of the questionnaire was examined by three other palliative care experts and the Index of Item Objective Congruent (IOC) score was between 0.67-1.00 and the overall mean was 0.98. The Cronbach's Alpha Coefficient for attitude, satisfaction, and stress in the workplace, career advancement, practice confidence, knowledge, and skill were 0.611-0.940 in all domains.

Questionnaire content

The questionnaire contained three parts; the first part was respondent data which included professional, PC working status: full-time (FT)/ part-time (PT), level of hospital, PC working experience, duration of PC education program, and

organization of training. A short PC education training program was described as < two weeks, two weeks to four months as an intermediate course, and ≥ one year as a full training program. The Second part contained seven attitudes, six satisfaction, nine stresses in the workplace, three career advancement, and two practice confidence questions. The last part was knowledge and skills which was composed of 50 questions. This part was divided into 14 sub-subjects; concept, assessment, symptom management, opioid administration, care planning, advanced care planning (ACP), communication skills, care of dying patients, psychosocial and spiritual support, family and caregiver support, self-care, special group care, ethics and teaching skills. All questions in parts 2 and 3 are five-point Likert's scale; 1 is minimum and 5 is maximum.

Statistical methods

Demographic characteristics of the sample are described using frequency and percentage. Scoring from the questionnaire was presented as mean and standard deviation (SD). The ANOVA test was used to determine the differences between groups. A p-value of less than 0.05 was accepted as significant. All analyses were done with STATA version 15 (StataCorp, College Station, TX).

Ethical considerations

The ethical issue of this survey was approved on 19 November 2000 by the Central Research Ethic Committee (CREC) of Thailand (CREC008/63BRm-BIO(S1).

Results

A total of 381 questionnaires were returned to the authors. The response rate was 79.38% (381/480). Two-thirds of the respondents were nurses; 229 Palliative Care Nurses (PCN) 14 Palliative Care Ward Nurses (PCWN) and 15 other registered nurses. Doctors were 22 PC full-time, 76 PC part-time, and 15 other specialists. More than half of the respondents were from general hospitals (60.4%) and approximately 40% had palliative care work experience of more than five years. Most PC providers were experienced in PC training programs (93.2%) and the majority attended intermediate PC programs (62.5%) (Table 1). Forty doctors and 53 nurses attended short course PC training programs. Forty-four doctors and 186 nurses were trained for the intermediate PC programs. Only a few nurses and 17 doctors were certified for full PC training. Most of the respondents were trained at Karunruk Palliative Care Center (KPC) (Figure 1).

Overall attitude, satisfaction, and working confidence among all professionals were good (mean score ≈3.5/5). While stress and career advancement were fair (mean score ≈3/5) (Figure 2). The lowest mean score of satisfaction was satisfaction with the PC workforce (2.81 ± 0.97) and the lowest mean score of career advancement was the chance to progress in the PC career path (2.80 ± 1.03). PC experience > five years, PC education, the specialty of doctors, and PC working characteristics of nurses, related to attitude level with statistically significant, p = 0.012, 0.003, 0.003, 0.003 respectively. Satisfaction for PC providers who worked in regional hospitals was greater than the general hospital group (mean score 3.81 ± 0.56 and 3.60 ± 0.56, p < 0.001). The specialty of doctors and PC education level were significantly related to the level of stress, p = 0.035 and 0.023). Experienced providers had less appreciation for career advancement (mean score 2.98 ± 0.89 and 3.16 ± 0.79, p = 0.037). PC working experience, PC education, and PC working characteristics of nurses were strongly related

Table 1. Baseline characteristics

Characteristics	Number (%)
Professional	
Doctor	110 (28.9)
Full-time PC doctor	22 (20.0)
Part-time PC doctor	76 (69.1)
Others	12 (10.9)
Nurse	258 (67.7)
Palliative Care Nurse(PCN)	229 (88.8)
Palliative Care Ward Nurse(PCWN)	14 (5.4)
Others	15 (5.8)
Pharmacist and others	13 (3.4)
Level of hospital	
General	230 (60.4)
Regional	151 (39.6)
PC work experience	
1-5 years	229 (60.1)
> 5 years	152 (39.9)
PC education	
Never	26 (6.8)
Short course	96 (25.2)
Intermediate course	238 (62.5)
Full course	21 (5.5)

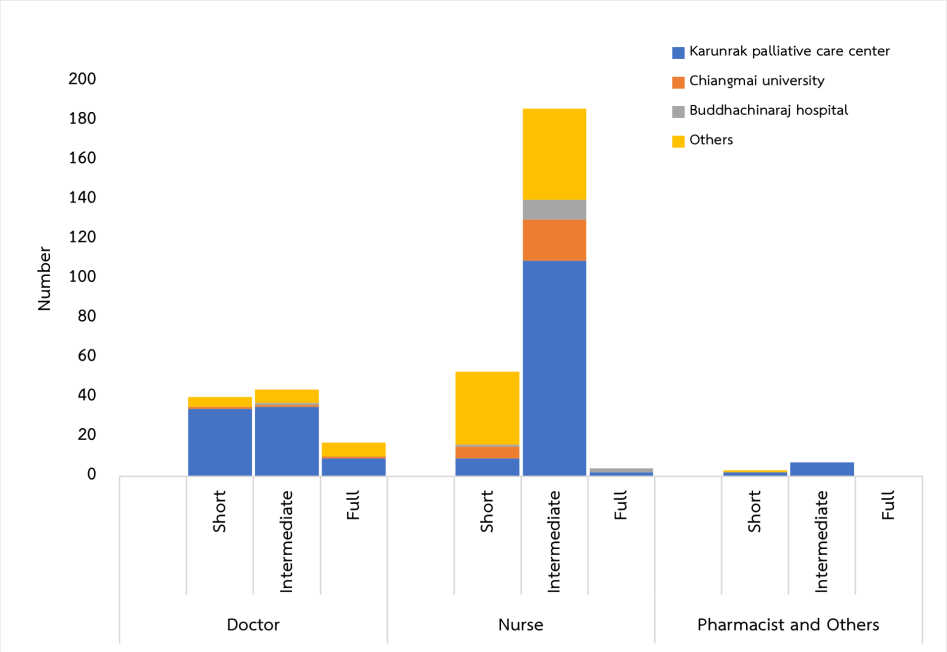

Figure 1. Palliative care education in medical professionals by training center

Table 2. Attitude, satisfaction, stress, career advancement and working confidence among professionals

Topics	Attitude	Satisfaction	Stress	Career advancement	Working confidence
Doctor					
Full-time PC doctor	3.86±0.48	3.57±0.57	2.92±0.73	3.27±0.89	3.95±0.71
Part-time PC doctor	3.71±0.40	3.70±0.52	2.84±0.57	3.31±0.62	3.80±0.61
Family Medicine	3.64±0.52	3.69±0.75	3.21±0.53	3.25±0.94	3.81±0.65
GP & Internal Medicine	2.96±0.38	3.38±0.34	3.64±0.52	3.50±0.58	3.00±0.00
P-value	0.003	0.526	0.035	0.939	0.054
Nurse					
PCN	3.77±0.46	3.73±0.58	2.75±0.78	3.00±0.90	4.07±0.66
PCWN	3.59±0.34	3.57±0.56	3.00±0.63	2.95±0.76	3.71±0.61
Other nurses	3.37±0.44	3.54±0.46	3.17±0.66	3.22±0.77	3.57±0.46
P-value	0.003	0.311	0.072	0.617	0.003
Pharmacist and others	3.67±0.29	3.38±0.59	2.65±0.58	2.92±0.64	3.88±0.46
Level of hospital					
General	3.72±0.46	3.60±0.56	2.78±0.70	3.06±0.83	3.91±0.67
Regional	3.74±0.44	3.81±0.56	2.89±0.76	3.14±0.85	4.01±0.63
P-value	0.700	<0.001	0.159	0.379	0.153
PC working experience					
1-5 years	3.68±0.46	3.69±0.56	2.88±0.72	3.16±0.79	3.79±0.65
>5 years	3.80±0.44	3.68±0.58	2.74±0.72	2.98±0.89	4.20±0.59
P-value	0.012	0.855	0.063	0.037	<0.001
PC education					
Never	3.58±0.53	3.65±0.65	3.00±0.84	3.49±0.76	3.65±0.75
Short course	3.61±0.42	3.63±0.54	2.97±0.77	3.25±0.76	3.65±0.57
Intermediate course	3.77±0.46	3.71±0.56	2.76±0.69	2.95±0.86	4.09±0.64
Full course	3.90±0.35	3.76±0.70	2.57±0.64	3.52±0.58	4.17±0.56
P-value	0.003	0.579	0.023	<0.001	<0.001

factors with working confidence, p < 0.001, < 0.001, and 0.003 respectively (Table 2). The mean scores of doctors and nurses were higher than pharmacists and other providers on attitude, satisfaction, stress, and career advancement. Medical professionals who worked at regional hospitals had more attitude, satisfaction, stress, career advancement, and working confidence than general hospital professionals. The personnel who had more than five years' experience had

greater PC attitude, greater working confidence mean scores, less stress, and less career advancement when compared with the less experienced group.

The domain of knowledge and skills contained 14 sub-subjects. The doctor group was divided into FT PC, PT PC, Family Medicine and General Practitioner (GP), and Internal Medicine groups. The knowledge and skills mean scores of both PC doctors were over 4/5 in all sub-subjects except special population care (FT 2.82 ± 1.24, PT 3.22 ± 1.18). In general, the mean score of both PC doctors was superior to Family Medicine and Family Medicine was superior to GP and Internal Medicine. Within the doctor group, mean scores were statistically significantly different in all sub-subjects (p = < 0.001- 0.027). (Table 3.) The mean score in all sub-subjects of PCN was the highest among nurses. PCWN is in the middle and other nurses are the lowest. Except for other nurses mean score was higher than PCWN in the special population sub-subject. Within the nurse group, mean scores were statistically significantly different in all sub-subjects (p = <0.001- 0.027) (Table 4). Level of education and variety of occupation were associated with knowledge and skills in all sub-subjects statistically significantly.

Discussion

PC knowledge, attitude, skills, and other domains in the PC providers' survey received a good response rate from all PC providers over Thailand. A total of 98 full-time and part-time PC doctor respondents from 34 regional and 86 gen-

Table 3. Knowledge and skills of doctors

Topics	Concept	Assessment	Symptom management	Opioid administration	Care planning	ACP	Communication skills
Doctor							
Full-time PC doctor	4.36±0.74	4.27±0.71	4.20±0.61	4.32±0.64	4.07±0.56	4.41±0.80	4.25±0.72
Part-time PC doctor	4.39±0.67	4.30±0.59	4.20±0.65	4.35±0.68	4.13±0.63	4.59±0.66	4.35±0.57
Family medicine	3.81±0.53	3.82±0.49	3.48±0.58	3.69±0.70	3.35±0.48	4.00±0.93	3.69±0.67
GP & Internal Med	3.00±0.82	3.10±1.06	2.56±0.81	2.63±1.16	2.71±0.60	3.25±0.96	2.97±0.77
P-value	<0.001	0.001	<0.001	<0.001	<0.001	0.001	<0.001
Topics	**Care of the dying patients**	**Psychosocial & spiritual support**	**Family & career support**	**Self-care**	**Special population care**	**Ethics**	**Teaching skills**
Doctor							
Full-time PC doctor	4.42±0.67	4.00±0.82	4.34±0.88	4.14±0.71	2.82±1.24	4.41±0.73	4.14±0.89
Part-time PC doctor	4.45±0.66	4.22±0.78	4.19±0.71	4.24±0.60	3.22±1.18	4.42±0.70	4.16±0.73
Family medicine	3.53±0.89	3.75±0.46	3.44±0.62	3.72±0.54	2.00±0.93	3.50±0.53	3.25±0.46
GP & Internal Med	2.88±1.13	3.00±1.63	3.13±1.03	3.13±0.92	2.50±1.29	3.25±0.96	2.25±0.50
P-value	<0.001	0.014	0.002	0.002	0.027	<0.001	<0.001

Table 4. Knowledge and skills of nurses

Topics	Concept	Assessment	Symptom management	Opioid administration	Care planning	ACP	Communication skills
Nurse							
PCN	4.23±0.73	4.16±0.69	3.95±0.76	3.78±0.90	4.04±0.75	4.21±0.84	4.08±0.72
PCWN	3.82±0.50	3.79±0.38	3.68±0.63	3.43±0.92	3.74±0.55	3.79±0.80	3.71±0.65
Other nurses	3.50±0.76	3.53±0.76	3.20±0.63	3.05±0.75	3.44±0.84	3.60±1.06	3.50±0.79
P-value	<0.001	0.001	0.001	0.004	0.006	0.007	0.003
Topics	**Care of the dying patients**	**Psychosocial & spiritual support**	**Family & career support**	**Self-care**	**Special population care**	**Ethics**	**Teaching skills**
Nurse							
PCN	4.19±0.79	4.03±0.81	4.16±0.75	4.05±0.74	3.39±1.06	4.22±0.80	4.00±0.89
PCWN	3.80±0.72	3.64±0.63	3.86±0.66	3.68±0.46	2.75±1.01	4.00±0.78	3.36±0.63
Other nurses	3.33±0.99	3.40±0.83	3.60±0.76	3.60±0.86	2.93±0.73	3.60±0.91	3.40±0.83
P-value	<0.001	0.004	0.009	0.018	0.027	0.012	0.002

eral hospitals may represent a lack of PC doctors (< 1 PC doctor/ tertiary hospital). The European Association of Palliative Care recommends two specialized palliative care services per 100,000 inhabitants.[33] For tertiary hospital palliative care specialist consult team, every 25 patients/month is recommended one full-time PC nurse, one full-time PC doctor, and one half-time PC social worker. Two PC nurses/12-hour shift and one PC doctor are required additionally for every five to six beds in the PC unit (ward).[34] According to Thai quality standards for palliative care, one full-time PC doctor (or part-time doctors equivalent to 40 hours/week) and three to four full-time PC nurses are required for every 200 beds of tertiary hospital.[35] Twenty-one Providers were certified for full PC training while 6.8% of respondents never attended a PC training program. According to quality standards, intermediate PC training (three to six months) is necessary for doctors and nurses at the tertiary care level.[35] Educational support may not be enough, as our study revealed that a higher PC education level was related to a better attitude, higher levels of working confidence, ability to cope with stress, knowledge, and skills significantly.[23, 36, 37] Most providers were trained by one organization, highlighting that the government should support this organization for continuity of training and encourage other organizations to establish PC training programs.

The level of attitude, satisfaction, and stress in the workplace, career advancement, and practice confidence of each PC occupation are not far from each other. From many articles, PC work is a high-stress and high-burden task[15,16] while our results show Thai PC personnel have a moderate score of stress (2.82/5). They consider PC as a valuable work task (4.5/5), with rates of high satisfaction, compassionate care, and improved self-morals from caring for patients and families (4.47/5).[38-41] Overall career advancement score was fair (3.09/5) and the chance to progress in the PC career path is 2.80/5. This correlates with the unclear structure of the PC workforce in Thailand which the Ministry of Public Health did not define.[42,43] High levels of experience and more PC involvement enhanced attitude, working confidence, and ability to cope with stress.[44]

Knowledge and skill mean scores in every sub-subject of doctors are higher than nurse and nurse is higher than other occupations,[45] respectively except special population care. Palliative care for a special population group is different from general adult PC and demonstrates more complexity. This area needs a multidisciplinary approach.[46-49] The higher level of education and the more involvement and familiarity with PC of doctors and nurses were related to the advancement of all sub-subjects in knowledge and skills.[32,44,45,50]

Limitations

Despite our study receiving a good response rate, some respondents were not involved in the PC field. This might be due to our sampling method which sent four copies of questionnaires to every PC unit. Some units might have PC providers less than four Providers thus inviting other providers to complete the questionnaires. Authors suggested that for further studies, PC professionals exclusively take part, and not be limited to four copies per PC unit.

Conclusions

Overall attitude, knowledge, and skills of Thai PC providers in tertiary hospitals are at a good level. On the other hand, the number of PC staff and PC education are insufficient. The PC workforce and the chance to progress in the PC career path are the topics most concerning for PC personnel. PC workforce, career advancement, and education should derive more support from the government, the Ministry of Public Health, policymakers, and stakeholders.

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