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Harmonising palliative care: a national survey to evaluate the knowledge and attitude of emergency physicians towards palliative care in Kuwait

Ameena Al-Ansari,¹ Saleem Suroor,¹ Sobhi AboSerea,¹
Wafaa Mostafa Abd-El-Gawad ^{1,2}

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¹Palliative Care Center, Kuwait Ministry of Health, Al Sabah Medical Area, Kuwait
²Geriatrics and Gerontology Department, Ain Shams University, Cairo, Egypt

Correspondence to
Dr Wafaa Mostafa Abd-El-Gawad, Geriatrics and Gerontology department, Ain Shams University, Cairo, Egypt; wafaager@hotmail.com

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ABSTRACT

Background and aim Although the challenges of integrating palliative care practices across care settings are real and well recognised, to date little is known about palliative care practices of emergency physicians (EPs) in Kuwait. Therefore, this study aims to explore the attitude and knowledge of EPs in providing palliative care in all general hospitals in Kuwait.

Method A cross-sectional survey was performed in the emergency rooms of all general hospitals in Kuwait using the Palliative Care Attitude and Knowledge Questionnaire.

Results Of the total number of physicians working in emergency rooms (n=156), 104 (66.67%) had completed the survey. 76.9% (n=80) of the EPs had an uncertain attitude towards palliative care. Most of the EPs (n=73, 70.28%) did not discuss the patients' need for palliative care either with the patients or with their families. Only 16 (15.4%) of the EPs responded correctly to most of the questions while nearly half of the EPs (n=51, 49%) had poor knowledge. Experience ≥ 11 years and better knowledge scores were independent predictors of positive attitude after adjustment of age, sex, qualifications, specialty, position and nationality (OR: 5.747 (CI 1.031 to 25.00), 1.458(CI 1.148 to 1.851); p values: 0.021, 0.002, respectively).

Conclusions Despite recognising palliative care as an important competence, the majority of the EPs in Kuwait had uncertain attitude and poor knowledge towards palliative care. Efforts should be made to enhance physician training and provide palliative care resources to improve the quality of care given to patients visiting emergency departments.

INTRODUCTION

Emergency medicine is a specialised branch of medicine that is concerned with the stabilisation of patients with acute illness or injury for definitive care aiming at preserving life regardless of their well-being.¹ With the advancement of cancer therapy throughout the world, many patients with cancer receive therapy late in their disease trajectory which in turn leads to more visits to emergency departments (EDs).²

Patients and their families under palliative care can experience stressful moments during the disease trajectory. Consequently, the first point of access is often EDs for patients with cancer, especially during the patient's last month of life.^{3,4} In a population-based cohort study conducted in the UK, it was found that 30.7% patients visited the ED once in their last month of life and 5.1% visited multiple times.⁵

Current knowledge reveals the positive outcomes of early initiation of palliative care in EDs.⁶ Most recent studies proved that early referral to the ED may be useful for patients who may benefit from palliative care.⁷ This integration can help to establish patients' care preferences, coordinate the aggressiveness of treatment, manage symptoms and place of death, and prevent upcoming undesired admissions.^{2,8-10}

Although the challenges of integrating palliative care practices across care settings are real and well recognised until now, little is known about them. Therefore, this study aimed to explore the attitude and knowledge possessed by emergency

physicians (EPs) in providing palliative care in EDs using the Palliative Care Attitude and Knowledge (PcAK) Questionnaire in all general tertiary hospitals in Kuwait.¹¹

METHOD

A cross-sectional survey was performed in the emergency rooms of all general tertiary hospitals under the Ministry of Health, Kuwait.

Palliative Care Attitude and Knowledge (The PcAK Questionnaire¹¹) is a newly developed questionnaire that is composed of three sections. Section 1 includes demographic data such as age, sex, level of education, work experience, workplace, medical subspecialty and palliative care experience. Section 2 assesses the patient's attitude and has 11 items. It employs a 5-point Likert Scale ranging from strongly disagree (1) to strongly agree (5). A negative or unfavourable attitude was considered if the participant scored ≤ 25 , uncertain attitude if the participant scored >25 but <41 , positive or favourable attitude if the participant scored ≥ 41 . The third section enquires about the physicians' knowledge. It includes two parts: the first part which had 3 questions was about self-reported knowledge and the second part consisted of 12 clinical questions. Regarding self-knowledge, a 5-point Likert Scale was used, ranging from an excellent response (5) to none (1). Regarding basic knowledge scores, poor knowledge was calculated if the participants scored $<50\%$ of the total score (≤ 5 points), fair knowledge if the participants scored $\geq 50\%$ to $<75\%$ (6–9 points), and good knowledge if the participants scored $>75\%$ (≥ 10 points).

The questionnaires were physically distributed to all EPs in all general hospitals in Kuwait and then collected back. The flow chart of the sampling procedure is presented in online supplemental figure S1.

Informed consent was obtained from all the participants. All data manipulation and analyses were performed using SPSS (Statistical Package for Social Science) V.20. A value of $p < 0.05$ was regarded as a sign of statistical significance. The consolidated criteria for reporting observational studies Strengthening The Reporting of OBServational Studies in Epidemiology (STROBE) checklist were used in this study.

RESULTS

Of the total number of physicians working in emergency rooms in Kuwait ($n=156$ physicians), 104 completed the survey in all general tertiary hospitals. The demographic characteristics of the respondents are available in [table 1](#) and online supplemental table S1. Most of the respondents were men ($n=90$, 86.6%), whereas women accounted for only 13.5% ($n=14$). Palliative care training among them was diverse due to varied nationalities and different medical schools. More than five nationalities are working in EDs in Kuwait (eg, Kuwaiti, Egyptians, Syrians, Jordanians,

Indians, Pakistani and others). Till recently, most postgraduate studies in emergency or internal medicine did not integrate palliative care as part of their curriculum. Formal training, which was in the form of workshops lasting for only 2–3 days, in palliative care was only reported in $<10\%$ of the respondents.

The median years of experience was 11 (IQR: 7–13 years). A majority of the respondents had a postgraduate degree in emergency medicine studies ($n=68$; 65.4%), followed by internal medicine studies (12; 11.5%). Only 18.3% ($n=19$) of the EPs had a favourable attitude towards palliative care, while about 76.9% ($n=80$) of them had an uncertain attitude and 4.8% ($n=5$) had an unfavourable attitude. Most of them agreed on the need for palliative care services for all adults and children who were terminally ill, not just those with cancer (Question (Q)7: $n=65$; 62.5%) and also approved that palliative care benefits include enhanced quality of life for the patient and the family (Q9: $n=81$; 77.9%), skilled care for terminally ill patients (Q10: $n=82$; 78.8%), and expert pain and symptom management (Q11: $n=85$; 81.7%). Because of the lack of shared medical records, they emphasised the lack of timely communication between palliative care providers and themselves (Q2: $n=71$; 68.3%). Many of them, dissatisfied with palliative care services in the past (Q1: $n=61$; 58.7%), reported unfamiliarity with the currently available palliative care services (Q3: $n=65$; 62.5%) and its types (Q5: $n=54$; 51.9%). Furthermore, the uncertainty about the length of coverage was 53.8% (Q4: $n=56$). Generally, EPs with experience of ≥ 11 years had significantly better attitude scores than EPs with experience <11 years ($p=0.019$) (online supplemental table S2). Most of the EPs ($n=73$, 70.28%) did not discuss the patients' need for palliative care either with the patients or with their families. It was found that 44 (42.3%) physicians reported little or no knowledge of pain assessment and management, while 58 (55.8%) and 41 (39.4%) reported good knowledge of other symptoms assessment and management, and counselling, respectively ([table 1](#)).

The overall percentage of EPs that responded correctly to most of the questions on the basic knowledge of palliative care was only 16 (15.4%), while 37 (35.6%) had fair knowledge; unfortunately, many of them ($n=51$; 49%) responded to $>50\%$ of the questions incorrectly. Surprisingly, none of the EPs answered all the questions correctly. Q11 for the symptoms of cord compression was the one with the highest percentage of correct answers (Q11: $n=94$; 90.4%), while Q8 regarding the most effective treatment for refractory dyspnoea had the lowest rate of correct answers (Q8: $n=18$; 17.3%). The EPs had mostly poor to fair knowledge regarding opioid handling, such as types of opioids (Q3: $n=57$; 54.8%), the WHO ladder for pain management (Q7: $n=39$; 37.5%), opioids toxicity (Q8: $n=31$; 29.8%), use of oral opioids (Q15:

Table 1 General description of the emergency physician respondents in Kuwait

	Total (n=104)	Experience <11 years (n=50)	Experience ≥11 years (n=54)	P value*
Age	38.83 (±9.5)	32.12 (3.88)	45.03 (8.87)	<0.001
Sex				
Male	90 (86.6%)	39 (78%)	51 (94.4%)	0.014
Female	14 (13.5%)	11 (22%)	3 (5.6%)	
Nationality				
Kuwaiti	21 (20.2%)	18 (38%)	3 (5.6%)	<0.001
Non-Kuwaiti	83 (79.8%)	32 (64%)	51 (94.4%)	
Qualification				
MBBS	30 (28.8%)	21 (42%)	9 (16.7%)	
Masters	59 (56.7%)	24 (48%)	35 (64.8%)	0.202†
MD, MRCP/MRCS	15 (14.5%)	5 (10%)	10 (18.6%)	
Specialty				
ER	68 (65.4%)	32 (64%)	36 (66.7%)	
Internal medicine	12 (11.5%)	2 (4%)	10 (18.5%)	
Surgery	10 (9.6%)	4 (8%)	6 (11.1%)	
Family medicine	3 (2.9%)	3 (6%)	0	
Others	11 (10.6%)	9 (18%)	2 (3.7%)	0.007†
Position				
Assistant registrar	6 (5.8%)	6 (12%)	0	
Registrar	86 (82.7%)	40 (80%)	46 (85.2%)	0.020†
Senior registrar	8 (7.7%)	4 (8%)	4 (7.4%)	
Specialist/consultant	4 (3.8%)	0	4 (7.4%)	
Discussion about palliative care				
No patients	73 (70.2%)	34 (68%)	39 (72.2%)	
1 to 5 patients	23 (22.1%)	11 (22%)	12 (22.2%)	
6 to 10 patients	6 (5.8%)	4 (8%)	2 (3.7%)	0.726†
11 to 15 patients	1 (1%)	1 (2%)	0	
>15 patients, families	1 (1%)	0	1 (1.9%)	
Self-assessment of his knowledge in:				
1-Pain				
Excellent	3 (2.9%)	1 (2%)	2 (3.7%)	
Very good	15 (14.4%)	8 (16%)	7 (13%)	
Good	42 (40.4%)	21 (42%)	21 (38.9%)	0.311†
Weak	29 (27.9%)	10 (20%)	19 (35.2%)	
None	15 (14.4%)	10 (20%)	5 (9.3%)	
2-Other symptoms				
Excellent	4 (3.8%)	2 (4%)	2 (3.7%)	
Very good	21 (20.2%)	10 (20%)	11 (20.4%)	0.683†
Good	58 (55.8%)	28 (56%)	30 (55.6%)	
Weak	14 (13.5%)	5 (10%)	9 (16.7%)	
None	7 (6.7%)	5 (10%)	2 (3.7%)	
3-Counselling				
Excellent	6 (5.8%)	2 (4%)	4 (7.4%)	
Very good	29 (27.9%)	15 (30%)	14 (25.6%)	
Good	41 (39.4%)	20 (40%)	21 (38.9%)	0.402†
Weak	18 (17.3%)	6 (12%)	12 (22.2%)	
None	10 (9.6%)	7 (14%)	3 (5.6%)	

*A value of $p < 0.05$ is statistically significant.

†Fisher's exact test.

MBBS, Bachelor of Medicine, Bachelor of Surgery; MD, Medical Doctorate; MRCP/MRCS, Membership of the Royal College of Physicians/ Membership of the Royal College of Surgeons.

n=19; 18.3%) and delirium (Q4: n=62; 59.65%), and management of catastrophic bleeding in a palliative care setting (Q10: n=20; 19.2%) (online supplemental table S3).

By univariate analysis only better knowledge and years of experience were associated with a positive attitude. Based on the literature review^{12–15} and expert consensus we tested whether better knowledge can be an independent predictor of positive attitude and adjusted for possible confounding factors including sex, age, nationality, qualification, position, subspecialty and years of experience.

By using the generalised linear method to find out the independent predictors of a positive attitude towards palliative care, we found that ≥ 11 years of experience (median years of experience) and better knowledge scores were independent predictors of positive attitude after adjusting for age, sex, qualifications, specialty, position and nationality (OR: 5.747 (CI 1.031 to 25.00), 1.458 (CI 1.148 to 1.851); p values: 0.021, 0.002, respectively) (online supplemental table S4).

DISCUSSION

To the best of our knowledge, this is the first survey of its kind conducted in Kuwait to evaluate PCAK targeting EPs anywhere in the entire region.

In this study, female physicians represented <14% of the total respondents. In Arab countries, female physicians face career development challenges due to early marriage and lack of support from their male guardians for travel and continuation of their professional training.¹⁶ In one study, female physicians were found to select primary healthcare or medical specialties related to women and children or non-clinical employment and rarely pursued rigorous medical specialties.¹⁷ This differs from the UK where 40% of EPs and ED physicians are women (nearly half) who are highly efficient and even superior to male physicians.¹⁸

In this study, 76.9% of the EPs had an uncertain attitude towards palliative care, while only 18.3% had a favourable or positive attitude. This was mainly due to dissatisfaction with palliative care services, types, accessibility, length of coverage, and lack of timely communication between them and palliative care providers, as reported in this study. These results are similar to the original results of the PCAK Questionnaire.¹⁰

This is similar to another study conducted by Lamba *et al*¹⁹ about barriers of integrating palliative care into EDs using a 5-point Likert Scale (1=strongly disagree, 5=strongly agree). The highest scores were found in lack of 24/7 PC services (score, 4.4), lack of shared medical records (score, 4.2), and miscommunication and emotional distress associated with the discussion of the goal of care (score, 3.3), and the crowded ED environment (score, 2.8).¹⁹

Many factors affect the attitude of EPs depending on their diverse experiences, which range from positive, encouraging to a negative and distressing experience.²⁰

This sometimes includes a sense of inability in the physicians to alter the course of the disease^{9,21} or feeling anxious and uncomfortable about discussing death and dying with the terminally ill patient.^{22,23} Lack of awareness about the spectrum of palliative care services and the absence of shared medical records between palliative care and EDs can cause communication-related issues. These can hinder the quality of care provision, especially at the end of life. Nearly half of the EPs (49%) had poor knowledge especially of opioid handling and managing of dyspnoea and catastrophic bleeding in a palliative setting. Although many of them subjectively reported good knowledge of counselling, and assessment and management of other symptoms (other than pain), they strongly agreed that palliative care is important for EPs' competence.^{9,24}

The physicians had mostly poor knowledge regarding opioid handling, delirium and management of catastrophic bleeding in the palliative setting. This is similar to many studies that reported a lack of knowledge in palliative care, especially in pain management proficiency.^{24,25}

The settings of emergency room such as crowded spaces, noisy environments, compromised privacy, frequent interruptions, time constraints, illness complexity and medicolegal threats^{26,27} make the initiation of palliative care discussions less than ideal in these settings.^{9,27} Unfortunately, because of being doubtful about the diagnosis and concerns of diminishing patients' or families' hopes or believing that patients are not prepared to listen to forthcoming information, often physicians hesitate to discuss patient prognosis either with the patients or their families.²⁷ Subsequently, aggressive interventions may ultimately be misaligned with overall goals of care, which can be retrospectively viewed as futile, harmful and painful.²⁸

The old model of palliative and emergency medicine as being mutually exclusive should be changed and instead, to be viewed as rather synergistic. Their relationship must evolve to achieve success in providing complex, comprehensive and compassionate care.²⁵ In 2013, the American College of Emergency Physicians, in the 'Choosing Wisely' campaign, emphasised early palliative care referral for patients with advanced cancer.²⁹ Nowadays, many educational interventional studies have started to focus on increasing awareness about palliative care medicine in the ED, aiming to potentially improve patient care and symptoms, and then measuring the number of palliative care consultations made before and after the educational intervention.^{30–33}

In the last few years, many countries such as the USA³⁴ and Canada³⁵ have started to implement core palliative care domains in emergency medicine. EPs face palliative care situations much more often than thoracotomies during their careers. Therefore, advanced palliative care competencies should be a part

of the EPs' skill set, in the same manner as advanced airway management.³⁶

Many studies have reported a significant correlation between the physician's level of knowledge and attitudes towards palliative care. This highlights that as participants' level of knowledge increases, their attitudes become more positive in hospitals especially in places like Ethiopia,¹³ Saudi Arabia¹⁴ and India.¹⁵ Thulesius *et al* suggested initiatives to educate physicians working in EDs to help them change their negative attitudes and contribute to the better quality of patient care.¹²

Limitations of the study

Most physicians working in governmental EDs in Kuwait were recruited in the study, but private hospitals or hospitals under other ministries, such as the ministries of interior and oil, were not included in the study. We observed lesser numbers of consultants/specialists in our sample despite distributing the questionnaire to all physicians in EDs. This may be attributed to the unwillingness to participate or physical unavailability inside EDs most of the time. In addition, most of the workload in EDs in Kuwait is carried out by registrars and senior registrars with a much smaller number of consultants/specialists.

CONCLUSION

Despite recognising palliative care as an important competence, the majority of EPs in Kuwait had uncertain attitudes and poor knowledge of palliative care. Lack of knowledge, direct accessibility to palliative care services and lack of support from palliative medicine specialists were the main reasons for an uncertain and negative attitude.

RECOMMENDATION

Efforts should be made to enhance physician training and awareness about available palliative care services. Direct access to medical records between palliative care and different EDs will improve communication between them and improve the quality of care provided to those patients. Attention should be given to palliative care by the national health policy. There is an urgent need for it to be incorporated into the national curriculum of medical students and EPs' education.

Ethics approval and consent to participate

The research project has been approved by the Institutional Review Board (IRB) of the Ministry of Health, Kuwait (No.210/2016, March 2016) conforms to the provisions of the Declaration of Helsinki. All subjects gave informed consent and their anonymity was preserved.

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ORCID iD

Wafaa Mostafa Abd-El-Gawad <http://orcid.org/0000-0001-7790-6917>

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