

Palliative care education for medical students: differences in course evolution, organisation, evaluation and funding. A survey of all UK medical schools

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Abstract

Background:

A proportion of newly qualified doctors report feeling unprepared to manage patients with palliative care (PC) and end of life needs. This may be related to barriers within their institution during undergraduate training. Information is limited regarding the current organisation of PC teaching across UK medical schools.

Aims:

To investigate the evolution and structure of PC teaching at UK medical schools.

Design:

Anonymised, web-based questionnaire.

Settings/participants:

Results were obtained from PC course organisers at all 30 UK medical schools.

Results

The PC course was established through active planning (13/30, 43%), adhoc development (10, 33%) or combination of approaches (7, 23%). The place of PC teaching within the curriculum varied. A student selected PC component was offered by 29/30 (97%). All medical schools sought student feedback. The course was reviewed in 26/30 (87%) but not in 4. Similarly, a course organiser was responsible for the PC programme in 26/30 but not in 4. Twenty-two respondents spent a mean of 3.9h (median 2.5)/week in supporting/delivering PC education (<1–16h). 17/29 (59%) had attended a teaching course or shared duties with a colleague who had done so. Course organisers received titular recognition in 18/27 [67%; no title 9 (33%); unknown 3 (11%)]. An academic department of Palliative Medicine existed in 12/30 (40%) medical schools. Funding was not universally transparent. PC teaching was associated with some form of funding in 20/30 (66%).

Conclusion:

Development, organisation, course evaluation and funding for PC teaching at UK medical schools is variable. This may have implications for delivery of effective PC education for medical students.

Word count: 250

Key statements

What is already known about the topic?

- A proportion of newly qualified doctors report feeling unprepared to manage patients with palliative care (PC) and end of life (EOL) needs.
- Medical schools vary in the degree of emphasis they place on delivering effective undergraduate PC teaching.

What this paper adds?

- Development, organisation, course evaluation and funding for student PC teaching at UK medical schools varies widely.

Implications for practice, theory or policy?

- A uniform approach to PC education set against agreed standards will help medical schools optimise undergraduate teaching and reduce unpreparedness amongst newly qualified doctors when managing patients with PC and EOL needs.
- Academic departments of Palliative Medicine, and opportunity and support provided by medical schools, help to strengthen palliative care teaching and learning in undergraduate medicine.

Introduction

Caring for patients and their families with palliative and end of life care (EOL/C) needs is an essential part of the work of most doctors, although Palliative Medicine (PM) was not acknowledged as a specialty in the UK until 1987.^{1,2} While the UK is still regarded by many as world-leading in providing palliative care (PC) and EOLC, the message that appropriate care should be available for all patients with chronic life-threatening illness, not just those with cancer at the EOL, is yet to be universally accepted.³ The WHO resolution of 2014 seeking to incorporate hospice and PC into national health services is likely to strengthen the discipline as a component of integrated treatment within the continuum of care.⁴

In order to ensure optimal patient care, education for healthcare professionals is essential. The need for medical students to receive PC education is widely acknowledged by regulatory bodies including the General Medical Council, clinicians and educators.^{5,6} Early progress in delivering PC education has been documented in the UK.⁷ Similarly, the European Association for Palliative 'Atlas' reported that PC training has been incorporated into all medical school curricula in 11 of 53 countries surveyed and partially included in a further 15.⁸ The majority of medical students also regard learning how to provide care for dying patients as very important: 61% of UK students and 53% of US students.⁹ More recently, two UK medical students made a plea for greater inclusion of PC teaching in the curriculum.¹⁰

Previous studies have found that PC training at medical school often failed to equip students for the realities of caring for patients with chronic, progressive life-threatening illnesses.¹¹ Similarly, many Foundation Year (FY) doctors consider that they had received too little PC education at medical school and feel unprepared to deliver basic PC, a view endorsed by consultants.¹² Areas causing most difficulty include coping with spiritual distress, social issues and psychological distress: despite such concerns, FY doctors rarely seek support from senior colleagues.¹² Some have suggested that the PC education provided may not always be based on sound educational principles and a needs assessment.¹³

A parallel paper from the present study found wide variation in teaching time, depth of coverage, degree of meaningful patient contact and assessment of learning, factors which are likely to influence preparedness to care for patients with PC and EOL needs.¹⁴ It is hypothesised that these may in turn be influenced by organisational issues at the institution delivering PC teaching, an area that has received limited research

attention. Previous research found delivery of effective PC teaching to depend on an enthusiastic lead to champion PC education.¹⁵ Additional promoting factors included an advocate in the university, support from colleagues and students, and taking advantage of periods of internal reorganisation. Among the factors inhibiting PC were limited teaching time, a rigid curriculum, resistance from lead specialities, lack of funding and absence of assessment.¹⁵

This study investigated the development, evolution, evaluation and funding of PC training for UK medical students by a detailed survey of PC course organisers, seeking to identify factors which support or interfere with the delivery of effective medical student PC education.

Methods

A 40-item web-based questionnaire was developed, based on the previous surveys of Field and Wee, in collaboration with a group of senior PC physicians and educators.⁷ This is further described elsewhere.¹⁴ An invitation letter, information sheet and link to the survey in SurveyMonkey® was emailed to lead PC course organisers at UK medical schools (n =30) in late 2013, with a supplementary data form.

The PC course organisers were either known to the researchers or were identified through emails and phone calls. When more than one individual was responsible (e.g. across two sites), then either a single agreed response was sought or the received answers were combined. Where no formal course organiser existed, then a senior figure involved in PC education at that medical school was approached to act as spokesman.

Only established medical schools approved by the GMC to independently deliver medical degree programmes were included. New medical schools that had yet to produce graduates were excluded. Similarly, universities delivering medical degree programmes in support of lead institution sites or institutions solely delivering non-clinical undergraduate teaching were not approached. The data analysis function of SurveyMonkey® provided descriptive statistics of responses, refined by a manual search of related questions, free –text responses and the supplementary information form. Data is presented in anonymised form. The study was approved by the University of Dundee Research Ethics Committee (UREC 12073).

Results

Completed surveys were received from all 30 medical schools: a response rate of 100%. All respondents were senior practising PC Consultants: three were Professors of Palliative Medicine.

PC education in the curriculum

Respondents chose several terms to describe the position of PC education within their medical school curriculum (Table 1), most commonly 'fully integrated within a larger course' (n = 15) and 'form a module within a larger course' (n = 17). Three schools covered PC solely by one or two lectures.

PC teaching was commonly linked to courses in General Practice, Oncology, Medicine, Elderly/Community Care, Chronic Diseases, Disability and Rehabilitation. One school reported teaching to occur throughout the course. Respondents raised difficulties with 'Lack of space/flexibility in the curriculum' or 'Pressure on time to deliver in an already full curriculum.'

Development of the PC course

Courses had developed through active planning with input from multiple stakeholders and reference to guidelines and educational theory (n=13, 43%), in an ad hoc manner (n=10), 33% or through a combination of approaches (n=7, 23%) (Table2).

Student Selected Components

An optional period of special study where students are attached to a PC team or hospice was offered by 27/30 (90%) of schools, was possible but not formally advertised in 2 and was unavailable in 1. Such student-selected components (SSCs) most frequently comprised 3 to 4-week continuous attachments at a hospice (13/29; 45%), usually combined with tutorials, attachment to specialist team members and various visits. Other patterns included periods of attendance over a longer timeframe and/or delivery of a research/audit project. Less than 10% of medical students were reported to undertake a PC SSC, commonly due to insufficient place numbers to meet demand.

Student feedback and course review

All medical schools obtained student feedback on PC teaching: 22 specific to PC teaching, 18 as part of another course, and 7 at the end of the year. The PC course was regularly reviewed by senior staff in 26/30

(87%) institutions, generally on an annual basis; four (13%) had no formal review process. No institution conducted any form of external review, though one respondent mentioned an imminent GMC visit. Three course organisers reported having no complete overview of the PC teaching in their school.

Course organisers

A named course organiser coordinated the PC programme in 26/30 (87%) medical schools, with shared responsibilities in 6/26; 4/30 (13%) medical schools had no formal lead. Comments included: 'No clear leader to take forward (I think it is me by default)', 'Lack of individual for overall leadership and management of course', 'Effectively, X has no meaningful lead in PC education and no time is available within specialist's job plans to take on this role, even if the university were willing to recognise this position.'

The 22 respondents who provided figures spent a mean of 3.9 hours per week in supporting and delivering PC education (range <1–16h). Among the other eight respondents, three reported no time allocated in their job plan; two stated that it was highly variable; one each replied 'part of wider role', 'evenings' and 'when I can'.

Over half of respondents (17/29, 59%) had attended a general or PC teaching course or shared duties with a colleague who had done so. Teaching qualifications included Membership of the Institute for Learning and Teaching, Fellowship of the Higher Education Academy and a range of certificates, diplomas and Masters degrees in education.

PC course organisers received titular recognition in 18/27 [67%; no title 9 (33%); non responders 3 (11%)] medical schools. Those with titles included: Tutor, Fellow, Teacher, Lecturer/Senior Lecturer, Lead, Director, Sub-Dean, Manager and four Professors.

Academic departments of Palliative Medicine existed in 12/30 (40%) medical schools, of which 10/12 (83%) had a formal PC course, compared with 10/18 (56%) with no such department. The presence of an academic department and other findings are shown in Table 2

Funding

Funding was not universally transparent. PC teaching was reported to be associated with some form of funding in 20/30 (66%) schools. In 10/20 (50%), funding was received by the course coordinator, in 11/20 (55%) by their employing organisation and in 18/20 (90%) by the hospice or other providers involved in teaching medical students. In five (17%) schools, teaching was reported not to have any funding with missing data from a further five. Comments included: 'Funding not given in most teaching sites, especially non-NHS', 'Lack of job planning and resourced teaching time', 'Lack of transparent funding in non-NHS sector' and 'Lack of funding (e.g. paid admin support).'

Comments around organisation

A number of respondents added insightful comments to their responses:

- 'I work in an ad hoc manner trying to get PC into the curriculum in any way possible. There is no formal university palliative medicine lead. Teaching leadership tends not to be organised by specialty but rather by learning topic, and there is no such topic specific to palliative medicine.'
- '[We have] no academic sessions for palliative care. There has been an expectation that the local NHS and charity sector palliative care teams will develop and deliver the undergraduate teaching alongside the ongoing clinical work and extensive postgraduate teaching and training commitments, with no recognition or remuneration from the medical school.'
- 'I have just noticed that we have been cut from Year 3, now only e-module on symptom control and rehabilitation lecture for care of the dying! These are good examples of how little specialist PC and care of dying patients are viewed by the university. It is not surprising that students reflect this view.'
- 'Hoping to get PC more effectively integrated in new revised curriculum, but it very much depends on motivation of a few key individuals to do so; very little organisational drive.'

Discussion

Information on the structure and organisation of PC teaching of UK medical schools is limited. A study comparing the mode of delivery of PC education in the UK between 2000 and 2013 found little change: 29% of medical schools delivered teaching as a "separate course" in 2000 compared with 25% in 2013.¹⁶ Other

selected responses were “module of a larger course (25% vs 30%), “covered in 1 or 2 lectures” (4% vs 5%) and “other (primarily scattered in the curriculum” (42% vs 40%).

Incorporation of PC into the curriculum involves ‘a complex process of individual, institutional, clinical, patient and curricular factors’.¹⁵ This study demonstrates considerable variation in the development and organisation of PC education across UK medical schools, with limited leadership, course review, titular recognition of educators and resource allocation in some institutions, especially those without academic PC departments. These factors are likely to have adversely affected the ability of some medical schools to adequately educate their students.

The 100% response rate obtained in this study is notable, giving a comprehensive view of the current state of UK PC education. While using a structured questionnaire format, additional comments in free text boxes were often highly informative. It is acknowledged that the views of other university staff, medical students and newly qualified junior doctors were not obtained.

Course development

The importance of developing courses based on educational needs assessment, sound educational theory and experiential learning is well recognised.^{17,18} Delivery may be optimised by means of a spiral curriculum building on previous knowledge, encompassing vertical and horizontal integration.^{15,19, 20} It is therefore reassuring that in 13/30 schools (43%) the PC course “Had developed as a result of active planning with input from multiple stakeholders and reference to guidelines and educational theory”, although there is cause for concern that course development was ad hoc in 10/30 (33%). Text responses from the remaining course organisers suggested that development was initially ad hoc and then became more planned, possibly in response to GMC edicts. At times it appeared that where PC was linked to another course the organisers had responded to an opportunity to “slot in “this ‘new’ subject somewhere. Others may argue that this is a legitimate way of gaining profile for a new area of practice

Student Selected Components

The GMC expects a proportion of curricular time to be spent in areas selected by students²¹, in some schools up to one-third of the course.¹⁹ Nearly all medical schools advertise PC SSCs (27/30; 90%), though less

than 10% of students undertake such an SSC, often due to limited placements available. While periodic attendance over a longer period may enable students to better realise the importance of PC and build on previous knowledge, there are potential gains of deeper experiential immersion as a team member.

Course feedback and review

Medical school curricula are frequently crowded; though many declare their support for PC training, this is not easy to achieve and may require strong leadership and alignment with more powerful specialties.^{15,22} Feedback is increasingly important²³ : time for PC education was increased in one institution as a result of positive student comments, at the expense of less highly rated teaching in another specialty.

PC course review was a regular event in most institutions, often involving others in the university, although none conducted any form of voluntary external review. Some have suggested that greater collaboration between course coordinators at different medical schools, including shared teaching tools, assessments/examinations, faculty development and research might result in better outcomes.²⁰ The Association for Palliative Medicine Special Interest Forum for Undergraduate Medical Education is developing this role in the UK.²⁴

Responsibilities, academic links and further education

While the majority of medical schools (26/30; 87%) had a designated lead, often shared, four had no one officially in charge although respondents felt able to participate in the survey. Their comments hint at frustration; indeed, how can PC education produce safe and effective doctors if there is no mandated leadership?

Twelve medical schools (40%) have academic departments of PM. More than half of all respondents had been awarded a teaching title, notably where academic departments existed (90%), though all having apparently similar responsibilities. At the time of writing, the UK has 8 professors of PM, 1 reader, 7 senior lecturers, 11 honorary senior lecturers and 2 lecturers (Roland J, Palliative Care Congress, Harrogate, 14 March 2014). The present figures are likely to underestimate numbers as staff active in PC may have titles linked to other disciplines or institutions. This compares well with Europe, where the leading countries are Germany (9 full professors of PM and 1 assistant professor) and Holland (8 and 2, respectively).⁸

Course organisers spend limited amounts of time on teaching each week, although the range was wide. This may point to an unstructured approach to their educational activities. Some responses suggest a disorganised picture, with eight respondents unable to provide a figure due to no time allocation in their job plan, their organisation considering teaching as part of a wider academic role, the duration too variable to quantify, or duties fitted around other activities. Yet those without dedicated hours were still expected to lead and teach; not ideal for ensuring optimal course delivery and student learning.

While having attended a teaching course or obtained an educational qualification does not necessarily equate with being a better teacher, it may suggest more commitment to this activity. Over half of the course organisers and/or their colleagues had undergone some form of training, often leading to a qualification or membership of an educational body. Again, the trend was higher in academic departments. It is suggested that those with higher degrees may find themselves empowered to negotiate with greater authority in their university.

Funding

There was considerable ambiguity around payment for PC education. While 20 course organisers reported that funds were paid, most commonly to providers, five medical schools apparently have no dedicated funding, teachers being expected to develop and deliver education ‘with no recognition or remuneration from the medical school’. Confusion may have been caused by a misunderstanding of the terms ‘organisation’ and ‘provider’, hence in Table 2 results are presented in terms of the presence or absence of any funding.

‘Informal’ and ‘hidden’ curriculum

It has been reasoned that any reforms to the curriculum are unlikely to succeed unless there are changes in ‘the values, attitudes, beliefs and behaviours that constitutes the culture of medicine’.²⁵ Medical education frequently downplays the importance of psychosocial aspects of care, with some clinicians considering PC to focus on medical failure to cure, to be ‘low tech’ and of little interest. As one respondent commented ‘that competency in this discipline is not expected of our trainees’ creates a difficult environment to reverse.^{6, 25} The study did not address the contribution of PC teaching outside of timetabled sessions (‘informal curriculum’) or the more subtle learning arising from cultural and institutional norms (‘hidden

curriculum’): ad hoc course development, absence of a designated course organisers or academic departments may reflect a low priority given to PC education in some schools.

Limitations

Limitation of the current methodology have been reported previously.¹⁴ In addition, formal/informal course organisers may have an incomplete picture of PC teaching across all disciplines and locations. This study does not address how good PC training should look like: what is the most effective model, when is the best time to deliver education, how much is sufficient and whether it is possible to evaluate the effects of training accurately.

Conclusion

There are considerable variations in the development and organisation of PC education across UK medical schools: despite the GMC describing caring for patients approaching the end of their lives as a core medical student competency,^{5,21} this is not being adequately addressed in all schools. Some PC courses have limited curricular time and content, and little or no recognised leadership, titular recognition of educators, course review and resource allocation. Academic PC departments are uncommon. Other courses are highly developed, with considerable time in the curriculum and resource allocation, largely due to support and opportunity provided by the medical school, and strong leadership from highly motivated individuals. It is time for all medical schools to optimise PC education: medical students’ future patients deserve nothing less.

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Table 1: Delivery of PC education across UK medical schools (N=30)

Module in larger course	6 (20%)
Fully integrated	8 (27%)
Covered in 1 or 2 lectures	3 (10%)
Variety of approaches	13(43%)
- <i>Modules in larger course and fully integrated</i>	3
- <i>Module in larger course and separate course</i>	2
- <i>Module in larger course and 1 or 2 lectures</i>	3
- <i>Modules, integrated and separate course</i>	1
- <i>Module, lectures and separate course</i>	1
- <i>Integrated course and 1 or 2 lectures</i>	2
- <i>Integrated. modules, lectures and separate course</i>	1
Separate course	0

Table 2: Presence of an academic department of PC and associated factors at UK medical schools (N=30)

	Academic Department n=12	No academic department n=18
Formal course lead	12 (100%)	14 (78%)
Teaching course/qualification	9 (75%)	7 (41% ; n=17)
Titular recognition	9 (90%; n=10)	9 (53%; n=17)
Formal PC course	10 (83%)	10 (56%)
Student feedback	12 (100%)	18 (100%)
Student selected component offered	12 (100%)	15 (83%)
Funding (all types)	10 (83%)	10 (56%)
Course development: Active planning	9 (75%)	4 (22%)
Course development: Mixed	1 (8%)	6 (33%)
Course development: Adhoc	2 (17%)	8 (45%)
Regular course review (annual/biannual/unknown)	11 (92%; 7/3/1)	15 (83%; 13/0/2;)