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Palliative care education in Swiss undergraduate medical curricula: a case of too little, too early

J Pereira Service de Soins Palliatifs, University of Lausanne, Lausanne; Service de Médecine Palliative, University of Geneva, Geneva, **S Pautex** Service de Médecine Palliative, University of Geneva, Geneva, **B Cantin** Service de Soins Palliatifs, University of Lausanne, Lausanne, **H Gudat** Hospice, Basel; University of Basel, Basel, **K Zaugg** Department of Radiation Oncology, University Hospital of Zurich, Zurich, **S Eychmuller** Palliative Care Service, Kanton Hospital, St. Gallen and Palliative Care initiative, University of Bern, Bern and **G Zulian** Service de Médecine Palliative, University of Geneva, Geneva

Palliative medicine education is an important strategy in ensuring that the needs of terminally ill patients are met. A review was conducted in 2007 of the undergraduate curricula of all five of Switzerland's medical schools to identify their palliative care-related content and characteristics. The average number of mandatory hours of palliative care education is 10.2 h (median 8 h; range 0–27 h), significantly short of the 40 h recommended by the European Palliative Care Association's Education Expert Group. The median time allocated to designated palliative care blocks is 3 h (range 0–8 h). Most of the education occurs before the clinical years, and there are no mandatory clinical rotations. Three schools offer optional clinical rotations but these are poorly attended (<10% of students). Although a number of domains are covered, ethics-related content predominates; 21 of a total of 51 obligatory hours (41%). Communication related to palliative care is largely limited to 'breaking bad news'. In two of the schools, the teaching is done primarily by palliative care physicians and nurses (70% or more of the teaching). In the others, it is done mostly by educators in other clinical specialties and ethics (approximately 90% of the teaching). These findings show significant deficiencies. *Palliative Medicine* (2008); **22**: 730–735

Key words: curriculum; end-of-life; palliative; undergraduate

Introduction

Education of health professionals constitutes a key strategy in efforts to improve the care of terminally ill patients. To this end, the need for palliative care to be adequately represented in undergraduate medical curricula has been emphasized.[1,2] Although some medical schools have implemented curriculum reform to ensure that their students graduate with the required palliative care-related competencies, it appears that many still lag behind.[3,4] In a recent study, for example, more than 50% of physicians from different specialties surveyed in Australia and six European countries, including Switzerland, reported having received no palliative care education.[5] The remaining indicated that they had received an average of only 4 h. To determine the extent and characteristics of palliative care education in Swiss medical schools, we conducted a detailed review of their respective medical curricula.

Current address: University of Ottawa, Ontario, Canada.
Correspondence to: Prof. Jose Pereira, Service de Soins Palliatifs, Hôpital Nestlé, 4e étage, local 4005, CHUV, Avenue Pierre-Decker 5, Lausanne, CH-1011, Switzerland.
Email: jose.pereira@chuv.ch; jpereira@scohs.on.ca

Methods

A standardised data collection form with closed and open items was constructed to guide a curriculum mapping exercise in each of the five medical schools in Switzerland (Universities of Basel, Bern, Geneva, Lausanne and Zurich). The elements in the form are described in Table 1. The goal of the exercise was to identify the quantity and characteristics of current palliative care content in the curriculum, as well as discover other opportunities for integrating palliative care education. The mapping was led by a palliative care physician educator at each of the medical schools. In all instances, it involved interviews with relevant curriculum leaders and committee members of different courses as well as detailed reviews of course documents across all six curriculum years.

The content was mapped against a set of competencies established by the Swiss Palliative Care Society's Undergraduate Medical Education Group. These were largely adopted from the Canadian Educating Future Physicians in Palliative and End-of-Life Care (EFPPEC) Project (http://www.afmc.ca/efppec/pages/main.

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Table 1 Major elements of the standardised data collection form

	Element	Sub-elements
Part 1	Background information	Person completing review; type of curriculum (e.g., problem or systems based)
Part 2	Palliative care content in courses (blocks) specifically dedicated to palliative care	Topics, number of hours, year of study, obligatory or optional, faculty, instructional methods used
	Clinical rotations	Duration, sites, year of study
Part 3	Designated palliative care content in other courses (blocks)	Topics, number of hours, year of study, obligatory or optional, faculty, instructional methods used. (e.g., end-of-Life themes in ethics course)
Part 4	Courses on topics relevant to palliative care but not designated as 'palliative care'	Topics, number of hours, year of study, obligatory or optional, faculty, instructional methods used. (e.g., workshop on amytrophic lateral sclerosis in neurology block/course)
Part 5	Palliative care content in examinations	Year of study, type of examination, number of items dedicated to palliative care, types of item
Part 6	Recent attempts (last 3 years) to improve palliative care education	Nature of attempts and whether or not these were successful (fully or partially)
Part 7	Major and minor challenges to future integration of palliative care content in curriculum	

html) and are divided into six large domains, namely: a) Definition of palliative care and palliative care principles; b) Ethics and decision-making; c) Communication; d) Pain and symptom management; e) Psychosocial and spiritual care and f) Others.

The results were compared with the European Association of Palliative Care (EAPC) recommendations on undergraduate palliative medicine education, which call for 40 h of palliative care education in 6 years of medical school, not including clinical rotations which should also be obligatory [Drs Marlene Filbert and Steffen Eychmuller. EAPC Education Working Group; Personal Communication]. Basic descriptive statistics were used to analyse the quantitative data, whereas themes were extracted from the qualitative data.

Results

Obligatory classroom-based education

Figure 1 shows the number of 'obligatory' hours dedicated to palliative care content in the respective curricula. The average number of hours is 10.2 h (median 8 h; range 0–27 h). Designated palliative care blocks make up a median of 3 h (range 0–8 h). Basel's medical school has the most number of obligatory hours (27 h). Most of these (25 h) are delivered outside of designated palliative care blocks in ethics-related courses. In Bern, there is currently no obligatory palliative care content.

With the exception of a total of 5 h in the 5th and 6th years, all the content delivered in the first two years refered to as the years ('pre-clinical' years). Despite the

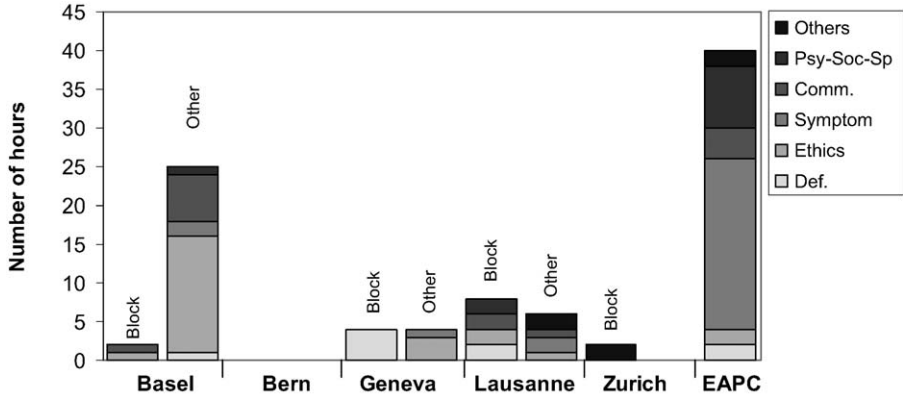

Figure 1 Number of obligatory hours dedicated to palliative care education in Swiss Undergraduate Medical Curricula compared to hours recommended by the European Palliative Care Association (EAPC) (Main topic areas are shown as per legend; block = palliative care blocks; other = palliative care content in other blocks).

'obligatory' designation at some of the schools, attendance of these sessions is often poor. In Lausanne, for example, 35–78% of students attended the four 2-h obligatory palliative care sessions in 2007. Less than 20% of students attended Basel's 2-h palliative care session in the 6th year.

Most of the obligatory education (93%, 50% and 43% at the Universities of Basel, Geneva and Lausanne respectively) is given within non-palliative care blocks or courses.

Non-obligatory classroom-based education

Zurich offers the most number of optional hours of palliative care content; a 28-h block which students may elect to do in their 2nd, 3rd or 4th years (16 h are practical, at the bedside, and 12 h are lectures). Approximately 40% of students participate in the course. In Bern, palliative care is used to support interdisciplinary collaboration (a total of 4 h). Only 16 medical and nursing students attend this course annually. Both Lausanne and Geneva offer opportunities tailored to students' needs but less than three students avail themselves of the opportunity each year. All the 'optional' contents are offered in the 2–4 years.

Topics covered

Although a number of domains are covered, ethics-related content predominates; 21 of a total of 51 obligatory hours (41%) (See Figure 1). In Basel and Geneva, 16 h (59% of all the obligatory content) and 3 h (28%), respectively are dedicated to ethics; and is presented mainly by ethicists. In Geneva, these hours are presented largely in the 2nd and 4th years and focus on concepts such as withholding and withdrawal of treatments and autonomy, particularly as it relates to assisted suicide. Representatives of a right-to-die association are invited to present their views. At the five schools, communication related to palliative care is largely centred on 'breaking bad news'. The most amount of time afforded to communication in palliative care is in Basel (approximately 6 h). Psycho-social and spiritual issues are addressed only in Basel and Lausanne; 2 h at each school. The palliative care content covered outside of palliative care blocks relates largely to ethics and communication. In Lausanne, palliative care is used to address some professionalism-related competencies in a second-year course ('Savoir Etre').

Clinical rotations

There are no obligatory palliative care clinical rotations in any of the five schools. Basel and Geneva each offer about 20 h of optional clinical rotations (in palliative care and hospice units and palliative care consult teams) and Zurich 16 h. With the exception of Zurich, where 40% of students enrolled in the rotations, participation by students in these optional clinical opportunities is minimal. In Basel, about 10% of students participate annually. In Zurich, the clinical experience includes visits to hospice and palliative care units and visits with hospital- and home-based palliative care consult programs, but other services are available to compensate. In Lausanne, there is no palliative care unit within the university hospital but there are some hospice-type units in the vicinity who are willing to assist. In Geneva, the absence of a community-based palliative care consult service limits possibilities for community-based patient visits. However, a large palliative care unit and hospital based consult services are available for in-hospital experiences.

Instructional methods

A variety of instructional methods are used. The most common are lectures (73% of all the classroom-based learning) and small-group problem-based learning (PBL) (22%). With the exception of Basel, there is limited use of simulated patients for acquiring clinical skills. In Lausanne, the palliative care team has recently redesigned its block of 8 h, adopting a PBL approach. Because of the limited hours allocated to palliative care, the palliative care team in Lausanne has also explored e-learning in the form of eight short online modules for independent self-learning to augment its classroom hours.

Faculty

With the exception of Lausanne and Geneva, there are no formal academic or clinical palliative care services within the university. In most other centres, palliative care education is delivered from within other academic entities such as Radiation Oncology (Zurich) and Geriatrics (Basel and Geneva). In Geneva, a senior lecturer in the Department of Geriatrics and Rehabilitation is appointed at 20% of time to develop palliative care education. In addition, physicians in a pain and palliative care consult team affiliated to the Service of Pharmacology assist with education. In Lausanne, the majority (90%) of obligatory hours are covered by palliative care staff (physicians, nurses and a chaplain), compared with 50% in Geneva. In Basel and Zurich, palliative care physicians are involved in only between 15% and 25% of the teaching.

Palliative care content in examinations

Palliative care content is generally not included in examinations. However, in Zurich, multiple-choice type questions on palliative care are included in the 3rd and 6th year examinations, and in Basel palliative care, objective structured clinical examinations (OSCEs) are found in the 2nd and 3rd year examinations.

Opportunities in other courses

Several opportunities for integrating more palliative care in the curricula exist. These would rely on integrating palliative care content within existing courses, mainly in the context of courses on communication, ethics, cancer, neurological, cardiac and pulmonary illnesses.

Recent attempts at improving palliative care content

Recent attempts at improving palliative content have been largely successful, especially in Basel and Zurich; most of the current content was added in the last 3 years. In Geneva, an additional 2 h to address palliative care issues were recently added to a PBL case on pulmonary disease.

Challenges to integrating palliative care content

A number of challenges were identified. These include curricula that are already full, curricula reform presenting moving targets for educators trying to incorporate palliative care content, lack of trained palliative care staff and lack of sites for palliative care clinical training (particularly palliative care units and home-based consult services). In several cases, course chairs that were approached to assist in identifying space for palliative care expressed support for palliative care education but did not allocate time for palliative care education.

In Lausanne a recent request to include 3 hours of palliative care in a 'general medicine' course was turned down.

Discussion

Several deficiencies in palliative care education in Swiss medical schools were identified in this study. They include a lack of mandatory palliative care education, the absence of obligatory clinical exposure to palliative care, a paucity of opportunities in the clinical years and a lack of palliative care academic divisions and faculty. In Bern, palliative care education is practically non-existent, whereas in Geneva, Lausanne and Zurich the hours fall considerably short of the EAPC recommendations. Although Basel comes closest to the EAPC's recommended 40 h with 27 h of mandatory education, 60% of these hours are dedicated to ethics-related content. In Geneva, the 3 h dedicated to end-of-life-related ethics is disproportionately orientated toward assisted suicide.

Care content is not exclusively delivered within designated palliative care blocks. Most of the obligatory education is given within other courses. This would be consistent with a strategy that strives to integrate palliative care transversally across a curriculum. This is not only practical from the perspective of resource and space availability but also supports the position that palliative care is relevant to many areas of health care. However, over-reliance on integrating it in other courses makes coordination of the content more difficult and risks losing cohesiveness. Moreover, it also runs the risk, in some cases, of being offered by faculty with limited palliative care education and experience. We, therefore, propose that in Switzerland at least 50% of the recommended hours should be within designated palliative care blocks organized by palliative care educators and that palliative care educators should be involved directly or indirectly in the remaining. Clearly, this figure is open to debate.

The concentration of education opportunities in the pre-clinical years and the lack of mandatory clinical rotations are concerning. The positive impact of clinical exposure to real patients, guided by experienced palliative care mentors, has previously been highlighted.[6] The need to include palliative care in the clinical years has also been stressed.[7] The optimal number of hours for obligatory clinical rotations has not been determined. The authors believe that 32–40 h would be appropriate.

The EAPC recommendations are not unrealistic. Palliative care content that comes close to, and even exceeds, the recommended hours has been reported.[4,8] In the United Kingdom, the average number of hours (excluding clinical rotations) dedicated to palliative care education in undergraduate curricula in 2000 was 20 h.[9] In Australia, a 2005 survey showed that although the median number of mandatory classroom time allocated to palliative care in medical schools was 12.5 h, some universities reported up to 46 h.[10] The median number of mandatory hours for clinical rotations was 20 h (range 2–30 h).

Consistent with previous reports, the uptake by students of optional or elective palliative care courses is minimal.[11,12] A variety of reasons may explain this. The general absence of palliative care content in examinations may undervalue its relevance for many students.[13] Students select elective learning opportunities on the basis of what interests them or what is perceived to be advantageous for future career option. Some erroneously believe that palliative care is provided exclusively by specialised palliative services and fail to appreciate that patients with progressive incurable illnesses are encountered in most specialties.

Instructors from a variety of specialties and disciplines are involved in teaching palliative care at Swiss medical schools. In Lausanne and Geneva, most of the teaching is done by palliative care physicians and nurses. In some cases, chaplains and ethicists are also involved. In Zurich and Basel, the teaching is largely provided by clinicians whose specialty areas and focus of clinical work is not palliative care. The issue of who should teach palliative care is unresolved. The WHO recommends that 'sufficient palliative care specialists should be trained and supported to provide this education'.[14] In the United Kingdom,

Ireland, Canada and Australia, most of the teaching is provided by specialised palliative care interdisciplinary teams that include specialist palliative care physicians.[9,11] The American Academy of Pain Medicine has recommended that palliative care courses should be planned and implemented by a designated faculty group with demonstrated training and experience in palliative care.[15] It would therefore appear reasonable to propose that, where available, palliative care educators with extensive clinical experience and training in the field should lead the development of palliative care education. They should collaborate with colleagues in other specialty areas when appropriate and possible and implement faculty development programs in palliative medicine.[13,16]

As shown by the experiences in Lausanne and Bern, palliative education provides opportunities to address other competencies not specific to palliative care.[17–24] These include interprofessional collaboration, holistic care, patient-centred care, self-awareness, humanism, community-based care and spiritual, religious and cultural sensitivities.

This study has several limitations. The number of hours does not provide information on the quality of the instruction or the specific competencies addressed. It does not explore hidden curricula where care of the dying may be devalued by the behaviour of some preceptors. A detailed mapping exercise was not conducted in Bern, and so it is possible that palliative care content may have missed there. Although the barriers to incorporating palliative care in curricula were not systematically studied in this survey, those reported were similar to ones previously identified.[9,25]

Conclusions

Attempts at addressing the problem of deficiencies in palliative care education are underway. At a political level, the Council of Europe's Parliamentary Assembly recommended in June 1999 that, amongst other recommendations, palliative care education be improved.[26] The World Health Organization has stated that palliative care has to be 'a core part of the training and continuing professional education of doctors, nurses, social workers, chaplains and other health professionals'.[14]

Despite this, numerous gaps were identified in this study in Swiss undergraduate medical curricula.

Curriculum reform is complex and numerous pedagogical, practical and political factors need to be considered. In Switzerland, as in other jurisdictions, accrediting and licensing bodies should ensure that this education is provided and that the topic is included in student evaluations in a meaningful way. Palliative care-related learning objectives should be inserted into The Swiss Catalogue of Learning Objectives for undergraduate medical training, the set of learning objectives that guide curriculum implementation and student evaluation, as these are currently absent.[27] Importantly, the acquisition of these competencies should be systematically evaluated through examinations and clinical assessments.

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