

# Consensus-Based Palliative Care Competencies for Undergraduate Nurses and Physicians: A Demonstrative Process with Colombian Universities

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## Abstract

**Background:** A World Health Assembly (WHA) resolution adopted in 2014 strongly encourages member states to integrate palliative care (PC) in undergraduate training for health professionals.

**Objective:** The study objective was to describe a consensus-based process workshop to develop PC competencies for medical and nursing schools in Colombia and to present a summary of the findings.

**Methods:** The workshop included 36 participants representing 16 medical and 6 nursing schools from 18 universities in Colombia. Participants were distributed in four thematic groups. Using the International Association for Hospice and Palliative Care (IAHPC) List of Essential Practices (LEP) as guidance, they were asked to discuss and define PC competencies at the undergraduate level. Participants provided feedback and approved each recommendation, and then were asked to complete an evaluation.

**Results:** The resulting competencies were separated into six categories: (1) Definition and Principles of PC, (2) Identification and Control of Symptoms, (3) End-of-Life Care, (4) Ethical and Legal Issues, (5) Psychosocial and Spiritual Issues, and (6) Teamwork. A comparative analysis revealed that treatment of several symptoms in the IAHPC LEP (pain, dyspnea, constipation, nausea, vomit, diarrhea, delirium, and insomnia) were included in the competencies. All of the IAHPC LEP related to psychological/emotional/spiritual care was included. The evaluation rate of return was 80%. The assessment was very positive: total score of 4.7/5.0; SD=0.426), with 89% considering the workshop to be helpful.

**Conclusion:** The workshop provided an opportunity for individuals from different disciplines to discuss competencies and achieve consensus. The resulting competencies will be helpful in the development of PC curricula for physicians and nurses throughout schools in Colombia and other countries.

## Introduction

**T**RAINING AND FORMAL EDUCATION in palliative care (PC) is an essential component for all health care professionals.<sup>1</sup> Education of health care workers is considered one of the crucial aspects suggested by the World Health Organization (WHO)—in addition to appropriate policies, adequate medicine availability, and service implementation—in order to advance PC in a country.<sup>2</sup> The World Health Assembly (WHA) resolution adopted in 2014 strongly encourages member states to integrate PC in undergraduate training for health professionals.<sup>3</sup>

The need to design curricula in order to achieve desired competencies<sup>4</sup> in health care has gained support over the past years and is advocated by the WHO,<sup>5</sup> but has not been implemented broadly.<sup>6</sup> The concept of ‘competence’ is complex<sup>7</sup> and has been defined in multiple ways.<sup>8–11</sup> In this paper and throughout the project described here, we applied the following definition of competence: “*Competence consists of integrated pieces of knowledge, skills and attitudes that can be used to carry out a professional task successfully.*”<sup>12</sup>

In April 2014, the authors (TP, RW, LDL) visited six universities in Colombia (Universidad del Rosario, Universidad del Tolima, Universidad de Caldas, Universidad de

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Manizales, Universidad Libre de Cali, and Universidad Javeriana de Cali) to have an open conversation with medical and nursing students about PC. Sessions were very well attended and generated significant interest. As a result, representatives of these universities requested our help to develop PC curricula for undergraduate medical and nursing students.

Medical and nursing schools in Colombia are responsible for the realization and mode of the curriculum for undergraduate education as long as they meet standards set by the ministry of education and the different boards. None of the boards nor the ministry of education have made PC mandatory, but a few medical schools (<5% of the schools in the country) have included the subject for undergraduate medical education.<sup>13</sup> To the best of our knowledge, there are no nursing schools currently offering PC courses for undergraduate students.

Based on the above and after considering the different options, the authors decided that enabling interaction and achieving consensus among the different universities was the most effective way to fill this need. To enable this project, funding from the IAHPIC (United States), German Academic Exchange Service (Germany), and Fundacion de Lima Bohmer (Colombia) was secured to develop and implement a workshop in Colombia.

The purpose of the workshop was to identify PC competencies at the undergraduate level for physicians and nurses in Colombia. This paper describes a consensus-based process to develop PC core competences for medical and nursing schools in Colombia and presents a summary of the findings that resulted from this process.

## Methods

This project was developed and implemented through the phases described below.

### Phase 0: Selection of participants

An invitation to participate in a workshop to identify competencies for the undergraduate level in medical and nursing schools was sent via e-mail to deans and chiefs of medical and nursing programs of 18 universities. The invitation described the objectives of the workshop and invited two representatives of each university: a teacher/professor in PC and a person responsible for curricula development. The invitation included the dates and location as well as confirmation that the travel, accommodation, and meals would be covered. Invitees were requested to respond before a selected date to allow time for planning. Criteria for the selection of the universities were

An existing contact with the school through previous personal or academic relations

Schools that had expressed interest in developing and implementing PC programs at the undergraduate level  
Schools that were teaching PC at the undergraduate level, postgraduate level, or both

A representative of the Colombian Association of Medical Faculties was invited, and the two Colombian associations for PC and a teaching hospice were represented. These NGOs were not included in the reported number of academic institutions. The group included 36 participants from 18 universities (16 medical schools and 6 nursing schools

representing 33.0% and 9.5% of the corresponding schools in the country), located in eight cities (Barranquilla, Bogota, Cali, Cartagena, Ibague, Manizales, Medellin, and Santa Marta). The vast majority were physicians (75% versus 16% nurses and 8% psychologists) with multiple backgrounds and expertise (geriatrics, PC, family medicine, ethics, education, and psychotherapy).

### Phase 1: Preparatory phase for the participants

Using the IAHPIC List of Essential Practices (LEP)<sup>14</sup> and the Recommendation of the European Association for Palliative Care (EAPC)<sup>15</sup> for the Development of Undergraduate Curricula in Palliative Medicine, relevant subject areas were identified and classified in four thematic fields (see Box 1). Two weeks before the meeting, participants selected their top preferred fields and then divided among the groups according to their preferences. Participants who did not give a preference were assigned according to the composition of the groups, resulting in four groups each consisting of nine persons. At that time, in addition to the resources listed above (WHA resolution, EAPC curriculum, and IAHPIC LEP), other publications<sup>4,12,16–27</sup> and relevant material<sup>28–31</sup> were made available to all participants via a shared Dropbox folder.

### Phase 2: Workshop

During the first part of the workshop, presentations were given by the authors describing the project background information with the following topics:

- WHA PC resolution, emphasizing the recommendations and member states obligations regarding PC education of health professionals
- PC education in Germany and Argentina as sources of comparison
- PC in Colombia, highlighting the importance of having health care professionals with the competencies to appropriately manage, treat, and refer patients
- Legal framework in Colombia regarding the provision of PC (Ley Consuelo Devis Saavedra)
- Level of student comfort regarding PC education in their own universities as based on a survey and report prepared by the authors after the visits described in the introduction section
- IAHPIC LEP: development and application
- Resources from other professional associations: EAPC core curriculum and EAPC core competencies

Instructions on the method were presented and explained. The lead question was to identify in each of these thematic fields what should be performed by a general practitioner/nurse caring for a patient with PC needs. Within the thematic fields, participants were asked to

- Decide whether the topics included in each field were appropriate
- Add new topics if they considered any were missing
- Select the appropriate level of intervention (diagnosis and referral or diagnosis and treatment) for each topic

Participants in each group were given eight hours to discuss and make recommendations to be presented to all the participants. The authors remained in the room, facilitating the discussions and answering inquiries from the participants.

BOX 1. TOPICS ASSIGNED TO THE WORKING GROUPS DURING THE DISCUSSIONS

Group 1	Group 2	Group 3	Group 4
<p><b>Basic concepts of PC</b></p> <ul style="list-style-type: none"> <li>- Definition</li> <li>- Aim of PC</li> <li>- PC situation and need in Colombia</li> <li>- PC law “<i>Consuelo Devis Saavedra</i>”</li> <li>- Resolution WHA</li> </ul> <p><b>Ethical and legal issues</b></p> <ul style="list-style-type: none"> <li>- Euthanasia, assisted suicide</li> <li>- Futile medical care</li> <li>- Patient’s and family’s wishes discrepancy</li> <li>- Legal issues at the end of life</li> </ul> <p><b>Management</b></p> <ul style="list-style-type: none"> <li>- Models of PC care provision</li> <li>- PC as part of the package of services</li> <li>- PC medications listed in the POS</li> </ul>	<p><b>Pain</b></p> <ul style="list-style-type: none"> <li>- Musculoskeletal, visceral, neuropathic</li> <li>- Mild to moderate, moderate to severe</li> <li>- Opioid-induced neurotoxicity</li> </ul> <p><b>Respiratory symptoms</b></p> <ul style="list-style-type: none"> <li>- Dyspnea</li> <li>- Respiratory secretions</li> </ul> <p><b>Others</b></p> <ul style="list-style-type: none"> <li>- National opioids regulation</li> <li>- Opioid availability and distribution system</li> <li>- Risk/detection of misuse and diversion</li> </ul>	<p><b>Gastrointestinal symptoms</b></p> <ul style="list-style-type: none"> <li>- Constipation</li> <li>- Diarrhea</li> <li>- Nausea</li> <li>- Vomiting</li> </ul> <p><b>Other symptoms</b></p> <ul style="list-style-type: none"> <li>- Anorexia-cachexia</li> <li>- Fatigue</li> <li>- Skin and mouth care (Wounds, ulcers, dry mouth, etc.)</li> </ul> <p><b>Others</b></p> <ul style="list-style-type: none"> <li>- Care at the end of life</li> <li>- Sedation</li> <li>- Special populations</li> </ul>	<p><b>Psychological, emotional, spiritual care issues</b></p> <ul style="list-style-type: none"> <li>- Anxiety</li> <li>- Depression</li> <li>- Delirium</li> <li>- Insomnia</li> <li>- Grief and bereavement</li> <li>- Spiritual needs</li> </ul> <p><b>Communication</b></p> <ul style="list-style-type: none"> <li>- Breaking bad news</li> <li>- Diagnostic</li> <li>- Prognostic</li> </ul> <p><b>Others</b></p> <ul style="list-style-type: none"> <li>- Teamwork/burnout</li> <li>- Education of patient and families</li> </ul>

WHA, World Health Assembly; POS, Obligatory Health Plan.

After one day of intensive work, a representative of each group presented the results of the discussion and their recommendations. The recommendations were discussed and changes were made (if required). Each issue was discussed and unanimously approved. Some subjects, such as palliative sedation and use of opioids at the community level, generated lengthy discussions. At the end of the workshop, participants were asked to respond to three questions:

- How are you going to use the results?
- Who will you talk to?
- When will this happen?

Based on these results and a final consensus process of the working group, the final document was constructed.

**Phase 3: Evaluation**

An online evaluation was sent one week after the meeting and a reminder was sent three weeks after, asking for assessment of the project organizers and the event itself (13 questions) using a Likert scale from 0 to 5 (0 being very bad and 5 very good). The following open questions were asked:

- What went well?
- What can be improved?
- What was missing?
- Comments

An additional question was included about the expected usefulness of the activity for implementing PC in the institution or to improve some aspects (in case implementation is currently being developed). One month later, a reminder was sent.

Quantitative data was analyzed by means of descriptive statistics using SPSS 21.0 (IBM, Armonk, NY). Free text was

recorded and analyzed with the help of qualitative data analysis software MAXQDA 11 (VERBI-Consult-Sozialforschung GmbH, Berlin, Germany, 1989–2014).

**Results**

Using the results from phase 2, the authors divided the resulting core competences in six main categories: (1) Definition and Principles of PC, (2) Identification and Control of

BOX 2. CATEGORIES AND SUBCATEGORIES OF THE RESULTING CORE COMPETENCIES

<p><b>I. Definition and principles of PC</b>                      Definition and principles of PC                      Models of PC</p> <p><b>II. Identification and control of symptoms</b>                      Pain                      Respiratory symptoms                      Gastrointestinal symptoms                      Insomnia                      Delirium</p> <p><b>III. End-of-life care</b>                      Palliative sedation                      End-of-life care</p> <p><b>IV. Ethical and legal issues</b></p> <p><b>V. Psychosocial and spiritual issues</b>                      Emotional issues                      Grief and bereavement                      Spirituality                      Caregiver and family                      Communication and therapeutic relationship</p> <p><b>VI. Teamwork</b></p>
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Symptoms, (3) End-of-Life Care, (4) Ethical and Legal Issues, (5) Psychosocial and Spiritual Issues, and (6) Teamwork. Box 2 shows the final outline with the main categories and subcategories. Table S1 includes the final competencies. All the participants approved the final version of the document. (See online supplementary Table S1 at [www.liebertpub.com/jpm](http://www.liebertpub.com/jpm) and at [www.liebertonline.com](http://www.liebertonline.com).)

### Evaluation

The response rate for the evaluation was 80%. The assessment was very positive, with a total score of 4.7/5.0 (SD = 0.426) and an average between 4.6/5.0 and 4.8/5.0 for all items asked including filling the expectation (see Table 1).

Eighty-nine percent ( $n = 24$ ) of the participants considered this activity to be helpful in the implementation of PC in the undergraduate curricula, or for those institutions that already have it, to improve the existing programs. There were 49 positive remarks, 25 suggestions for improvement, and 20 remarks about missed issues.

Three participants were not sure about its helpfulness (“I don’t know”), as this depends on the willingness of the university to adopt changes in the curricula, especially when the process requires compromises from other specialties and deans. In addition, they fear that changes in curricula usually takes significant time and momentum may be lost.

The organization (including methodology and logistics) was rated positively, but some participants suggested smaller groups to improve discussions and interactions. Different consensus strategies were suggested: voting, virtual agreement, and templates for the formulation of competences. Suggestions included to broaden themes, include psychology and pediatric PC, and give deeper insight into the competence concept.

The composition of the group (transdisciplinarity, diversity) and group dynamics were rated positively by all the participants. However some participants suggested a better balance between different disciplines and the participation of other institutions (such as the ministry of health). The limited expertise and knowledge regarding PC of some participants was perceived negatively. Self-criticism such as better preparation/reading of the material was also raised.

The initiative itself was highly rated as it related to a crucial PC need in the country and generating awareness. The process to reach a consensus was rated positively. Participants rated the results as good; however, three participants expected to reach more concrete results (i.e., a defined curriculum). Thirteen persons complained about the limited time allocated for discussions during the second day and suggested that it should be longer to enable deeper discussions. Final comments were mostly congratulations for the activity. Some participants were concerned about the continuity and implementation of this initiative and the loss of motivation and commitment for further development.

### Discussion

With few exceptions, most of the published documents and resources identified in the literature and made available to the participants through the Dropbox folder were either specific for medical education or for multidisciplinary programs. There is limited literature specific to undergraduate PC curricula for nursing education.

Participants in this workshop represented several universities and different backgrounds. The resulting document includes competencies in PC for undergraduate medical and nursing students. The final document was distributed by e-mail to all the participants and translated into English. Both versions (Spanish and English) have been uploaded in the IAHP website<sup>32</sup> and are available to the global PC community for educational purposes.

The resulting competencies are separated in six categories: (1) Definition and Principles of PC, (2) Identification and Control of Symptoms, (3) End-of-Life Care, (4) Ethical and Legal Issues, (5) Psychosocial and Spiritual Issues, and (6) Teamwork; each includes a specific set of desired competencies. A comparative analysis reveals that identification and treatment of several of the physical symptoms included in the IAHP LEP (pain, dyspnea, constipation, nausea, vomiting, diarrhea, delirium, and insomnia) were included in the recommended competencies. Not included were identification and treatment of wounds, ulcers, skin rash and skin lesions, dry mouth, mucositis and cough, and identification and referral of fatigue, anorexia, anemia, somnolence, and sweating.

Most of the practices related to psychological/emotional/spiritual care needs as well as psychological distress and suffering of the relative and/or caregiver in the IAHP LEP were included in the competencies. Depression and anxiety were not mentioned specifically, but it can be assumed they are included in the broad competence, “Recognizes the needs and emotional problems and provides support to the patients and family.” Spiritual needs as well as grief and bereavement in the IAHP LEP are also included.

On the other hand, the resulting competencies include specific competencies desired on medications (knowledge of essential medicines for PC, administration of medicines with precaution, opioid rotation, risk factors in opioid abuse, opioid equianalgesia, dilutions, conversions, and drug interactions) as well as a specific section on competencies needed for palliative sedation, including definitions, recognizing the refractory symptoms, knowledge on administration, operational aspects of sedation, and communication. None of these are included in the IAHP LEP.

TABLE 1. ASSESSMENT OF THE EVENT<sup>a</sup>

	<i>Mean (SD)</i>
<b>Facilitator</b>	
Command of the subject	4.8 (0.395)
Moderation for consensus	4.6 (0.688)
<b>Activity</b>	
Organization	4.7 (0.832)
Logistic	4.7 (0.823)
Contents	4.7 (0.555)
Methodology	4.6 (0.636)
Group activity	4.5 (0.643)
Material	4.7 (0.608)
Schedule	4.7 (0.480)
Venue	4.8 (0.423)
Social activity	4.7 (0.447)
Refreshments and lunch	4.6 (0.447)
Expectations	4.6 (0.679)
<b>Total</b>	<b>4.7 (0.426)</b>

<sup>a</sup>Likert Scale from 0 to 5—0, very bad and 5, very good.

BOX 3. EAPC CORE COMPETENCIES IN PC <sup>33</sup>	
1. Apply the core constituents of PC in the setting where patients and families are based.	7. Respond to the challenges of clinical and ethical decision making in PC
2. Enhance physical comfort throughout patients' disease trajectories.	8. Practice comprehensive care coordination and interdisciplinary teamwork across all settings where PC is offered
3. Meet patients' psychological needs	9. Develop interpersonal and communication skills appropriate to PC
4. Meet patients' social needs	10. Practice self-awareness and undergo continuing professional development
5. Meet patients' spiritual needs	
6. Respond to the needs of family carers in relation to short-, medium-, and long-term patient care goals.	

EAPC, European Association for Palliative Care.

An additional analysis between the resulting competencies and the EAPC core competencies<sup>33,34</sup> also reveals that although the structure and categorization of topics are different, most of the issues they cover are the same. The competencies are much more detailed and specific, while the EAPC core competencies are presented in broader general terms. However, the 10 categories (see Box 3) all include the competencies resulting from the workshop in Colombia.

Following Miller's pyramid of clinical competence, physicians and nurses should be able to adequately assess, evaluate, and treat patients with PC needs and refer to specialists when necessary.<sup>35</sup> Miller's pyramid consists of four levels:

- Knows:** Knows some knowledge
- Knows how:** Knows how to apply that knowledge
- Shows:** Shows how to apply that knowledge
- Does:** Actually applies that knowledge in practice

The first two levels refer to cognition while the second two refer to doing. Research shows that the cognition zone ('knows' or 'knows how') correlates poorly with the behavior zone ('shows' or 'does'). Classroom teaching only does not lead to competence, and hence undergraduate students should also be exposed to bedside teaching, consultations, and communication sessions to be competent in PC.

The resulting list of competencies is quite comprehensive and therefore may be challenging to adopt in undergraduate programs. However, any efforts to implement a PC curriculum should include a component of showing and doing in order to ensure that physicians and nurses have the desired competencies identified by the group.

The practice and incorporation of identified competencies may result in better quality of service delivery in primary PC in Colombia and it is hoped in other countries as well. We recommend the universities and educational programs use it as a model to develop their own PC curriculum tailored to meet the needs of their patients while taking into account their own resources and the educational needs of their students. These needs may vary in different countries: in those countries where most of the students fully engage in clinical practice after graduation, teaching goals and competencies should focus mainly on clinical aspects; while in those where the students must go through a residency before their professional practice, teaching goals and competencies should balance PC philosophy, humanistic aspects of nursing and medicine, along with basic clinical competencies. In both cases, recently graduated students may become agents of change during their postbasic training.

We encourage organizations, institutions, and individuals to help distribute and promote the document, presenting it espe-

cially to universities and academic decision makers. This is not a fixed document and it is open to changes, revisions, refining, and improvement according to local and national needs.

We plan to evaluate the acceptance and impact of the competencies on the quality of education, health professionals, and patients and their families. This project aims to be reproduced in other countries under an initiative called Transforming the System.

**Conclusion**

The workshop provided an opportunity for individuals from different disciplines (physicians, nurses, psychologists, and social workers) to discuss PC and achieve consensus. The resulting competencies will be helpful in the development of curricula for physicians and nurses throughout schools in Colombia and other countries.

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**Author Disclosure Statement**

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