Chair ICO/UVIC-UCC of palliative care at the University of Vic – Central University of Catalonia: an innovative multidisciplinary model of education, research and knowledge transfer

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ABSTRACT

Objectives Generation and dissemination of knowledge is a relevant challenge of palliative care (PC). The Chair Catalan Institute of Oncology (ICO)/University of Vic (UVIC) of Palliative Care (CPC) was founded in 2012, as a joint project of the ICO and the University of Vic/Central of Catalonia to promote the development of PC with public health and community-oriented vision and academic perspectives. The initiative brought together professionals from a wide range of disciplines (PC, geriatrics, oncology, primary care and policy) and became the first chair of PC in Spain. We describe the experience of the CPC at its fifth year of implementation.

Methods Data collection from annual reports, publications, training and research activities.

Results Results for period 2012–2017 are classified into three main blocks: (1) Programme: (a) The advanced chronic care model (Palliative needs (NECPAL)); (b) the psychosocial and spiritual domains of care (Psychosocial needs (PSICPAL)); (c) advance care planning and shared decision making (Advance care planning (PDAPAL)); and (d) the compassionate communities projects (Society involvement (SOCPAL)). (2) Education and training activities: (a) The master of PC, 13 editions and 550 professionals trained; (b) postgraduate course on psychosocial care, 4 editions and 140 professionals trained; and (c) workshops on specific topics, postgraduate training and online activities with a remarkable impact on the Spanish-speaking community. (3) Knowledge-transfer activities and research projects: (a) Development of 20 PhDs projects; and (b) 59 articles and 6 books published.

Conclusion Being the first initiative of chair in PC in Spain, the CPC has provided a framework of multidisciplinary areas that have generated innovative experiences and projects in PC.

INTRODUCTION

Training and education in palliative care (PC) is essential in the development of quality PC provision and major points of a Palliative Care Public Health Programme.1 In 1992, the PC service at the Catalan Institute of Oncology (ICO) in Barcelona—a monographic cancer institute—developed its own training strategy, implementing basic and intermediate levels, and the first master’s degree in PC started in 1997, jointly with the University of Barcelona.

Additionally, due to the experience acquired in the implementation of the Catalonia WHO Demonstration Project for Palliative Care and its international impact, there were increasing demands for support for the design, implementation and evaluation of PC services and programme in Spain, Europe and Latin America.2 These policy activities, establishing contracts and agreements with public or private organisations, had the support, as main partner, of the Catalan Department of Health.
In 2007, the Qualy Observatory was created at the ICO, as the think-tank branch of the PC clinical activities, oriented to give support to the quality improvement and developing programme and services and to add value to the existing clinical educational activities (basic, intermediate and master PC courses).

In 2008, this department was designated as WHO Collaborating Centre (WHOCC-ICO), and the vision was expanded to the development of PC approach and chronic care policies. In this sense, the opening of perspectives of the evolution of the Catalan PC policies towards advanced chronic care, the early identification of patients in need of PC, the inclusion of patients with different advanced chronic conditions, the community perspectives and the social issues have been focal points of the WHOCC-ICO.

Another opportunity for development was the creation of the programme for the comprehensive care of people with advanced chronic conditions, supported by ‘la Caixa’ Foundation, which has implemented a wide range of psychosocial services in Spain, and required an intensive emphasis of education, training and research on psychosocial and spiritual care for people with advanced chronic conditions.

These changing scenarios of needs and demands required to open the perspective to the community and other disciplines beyond cancer and to implement an academic position with different partnerships. This was the origin of the Chair of PC University of Vic – Central University of Catalonia (UVic-UCC)/ICO. This paper describes the main characteristics and activities of the Chair of PC at the UVic-UCC for the period 2012–2017.

Chairs at the UVic-UCC are conceived to develop projects on education and research in a specific topic or area. They are defined as academic units that allow collaboration between the university and other organisations, either public or private, to generate scientific knowledge and transfer it to society. The Chair of PC UVIC/UCC/ICO was built with a formal agreement between the ICO and the UVIC/UCC in 2012. The model of organisation was based on the ‘spin-off’ concept: a flexible and innovative organisation with clear aims and oriented to outcomes and partnerships. This new approach was meant to focus on promoting public health and community-oriented approach and to widen access to PC beyond cancer. Its mission, as shown in table 1, is to generate and spread knowledge on integral PC and transfer it to practice at the organisations that aim at improving quality. The chair develops aspects of conceptual and methodological innovation, through training and research activities. Our chair is made by a group of multidisciplinary professionals, led by a professor, from diverse allied institutions such as the ICO, the UVIC/UCC, a sociohealth centre and a primary care team. All these professionals work jointly as a team in the project of the chair. Funding for the chair comes from diverse sources: the ICO and the UVIC/UCC cover part of the staff, and multiple organisations, both public and private, provide contracts for either consultation or educational activities.

**METHODS**

We have retrieved data from yearly proceedings, minutes, surveys and annual reports for the period 2012–2017.

**RESULTS**

The main results of the activity developed by the chair of PC for period 2012–2017 have been classified into three main blocks:

1. Main results of areas of interests and programme.
2. Main results on education and training activities.
3. Main results on knowledge-transfer activities and research projects.

**Key areas of work and programmes**

The NECPAL programme for the comprehensive and integrated care of people with advanced chronic conditions

The NECPAL programme is the practical application of the comprehensive, timely and integrated PC of people with all types of chronic conditions with a community and population perspective. These changes of perspectives have been described as the conceptual transitions of PC in the 21st century.

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Principles, mission, vision and main characteristics of the chair of PC ICO/UVic-UCC</th>
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<tbody>
<tr>
<td><strong>Principles</strong></td>
<td>PC considered as a human right for all and an essential element of healthcare systems.</td>
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<tr>
<td><strong>Mission</strong></td>
<td>To promote PC development with public health (quality, equity and coverage), population (territories and all settings) and community (social and healthcare) perspectives.</td>
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<tr>
<td><strong>Vision</strong></td>
<td>Centre for knowledge with influence in decision making for policy makers and managers.</td>
</tr>
<tr>
<td><strong>Characteristics</strong></td>
<td>Innovation, flexibility, adaptation to needs and demands, and focus on outcomes. Combined education–implementation–research.</td>
</tr>
<tr>
<td><strong>Inter and multidisciplinary approach</strong></td>
<td>Respectful multidisciplinary partnership between: PC, oncology, geriatrics, primary care, policy and managerial disciplines. Respectful interdisciplinary partnership between professionals (doctors, nurses, psychologists, social workers, occupational therapists, physiotherapists, chaplains and so on).</td>
</tr>
<tr>
<td><strong>Values</strong></td>
<td>Oriented to improving care for the most vulnerable with the public health values (coverage, access, equity and quality). Compassion, humanism and respect.</td>
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PC, palliative care; UVic-UCC, University of Vic – Central University of Catalonia.

Figure 1 Worldwide use of the NECPAL CCOMS-ICO tool.

The programme started in 2010, and it has included a wide range of activities, combining the generation of knowledge, research and evaluation of the activities, the dissemination of this knowledge through policy design, education and training and the implementation of actions in the organisations to improve the quality of care. The target patients have been people with advanced chronic conditions, specially frailty, multimorbidity, dementia in the elderly and all types of organ failures.

The areas of focus have been sequentially: (1) the design and validation of the NECPAL CCOMS-ICO tool; (2) the epidemiology (prevalence of patients with advanced chronic conditions in need of PC); (3) the clinical issues (characteristics, needs and effectiveness of interventions); (4) the ethical issues and challenges of early identification; (5) the model of person-centred care and the comprehensive care for patients and families; and (6) the model of integrated care of organisations to be adapted to the new conceptions and its insertion in public health policies.

Main results of the programme include the translation of the NECPAL tool into 10 different languages, as shown in figure 1. Additionally, the number of prevalent patients identified in Catalonia in 2017 as ‘Advanced patients’ was 26 716 and 160 905 as ‘Complex chronic patients’ (source: Catalan Health System Observatory; http://observatorisalut.gencat.cat/en/central_de_resultats/index.html).

The PSICPAL programme: psychosocial and spiritual care of essential needs of patients and families
In order to address the psychosocial and spiritual needs of patients with advanced conditions, ‘la Caixa’ Banking Foundation (FBLC) established a programme in 2008 to create psychosocial care teams. Currently, there are 42 teams with 220 professionals (mainly psychologists and social workers) in Spain. The FBLC appointed the chair to lead the scientific direction of the programme, for design, implementation and evaluation including training of professionals. Our studies performed within this programme during the period 2010–2017 show evidence on the effectiveness of the specific and specialised psychosocial interventions to reduce levels of suffering and distress in PC patients and their families. Several tools to provide a systematic, holistic assessment of the psychosocial needs of end-of-life (EOL) patients have been created and validated under the auspices of this programme as well.

Additionally, we have developed conceptual and training proposal of the model of care centred in the so-called essential needs of patients (spirituality, dignity, autonomy, key relations and hope), focused on a model of professional competencies.

The PDAPAL programme: promoting advance care planning (ACP) and shared decision making
The implementation of a comprehensive care model requires the full development of ACP. ACP has been identified as one of the main challenges for the implementation of the advanced chronic care model in Catalonia. To respond to this challenge, a comprehensive programme has been designed and implemented by the Department of Health (DoH) and led by the CPC. The programme started in 2013, and it includes the elaboration of a consensus policy document and educational activities including practical recommendations.
for the ACP process, an online course, workshops, massive open online courses (MOOCs) and research. Additionally, we have developed research and training activities on the methodology and practice of shared decision making in the care of persons with advanced chronic conditions and frailty.\textsuperscript{14}

The SOCPAL programme: involving society through compassionate/caring communities initiatives

From 2015 onwards, the chair has been actively involved in the programme ‘Vic, caring city’. This project as an expansion of a comprehensive and integrated system of PC has been jointly developed with the area of Social Welfare at the city council of Vic.

The main aims consisted in promoting changes in social and cultural attitudes towards the EOL and providing integrated care for people with advanced chronic conditions and social needs such as loneliness, poverty or low access to services at home among others. The selected slogan was ‘Living with meaning, dignity, and support the end of life’. The programme for the first year has included 19 activities (cultural, training, informative and mixed) and preliminary results at 1 year have been positive.\textsuperscript{15}

### Table 2

<table>
<thead>
<tr>
<th>Area</th>
<th>Project title</th>
<th>Project aim</th>
<th>Achieved and/or expected results</th>
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<tbody>
<tr>
<td>PC</td>
<td>PADES Catalonia</td>
<td>Evaluate and proposals of improvement for the home care support teams in Catalonia.</td>
<td>Proposals/projects of quality improvement of home care support teams. Quality and qualitative evaluation done. One PhD project ongoing.</td>
</tr>
<tr>
<td>Chronic PC</td>
<td>Nursing homes.</td>
<td>Improvement PC approach in nursing homes.</td>
<td>Proposals/projects of quality improvement plans for nursing homes. One PhD project ongoing.</td>
</tr>
<tr>
<td>Chronic PC</td>
<td>Chronic pain (prevalence and characteristics) in patients with advanced chronic conditions in the community. Primary care service in Vic (EAP VIC).</td>
<td>Evaluate the prevalence and characteristics of chronic pain.</td>
<td>Prevalence and characteristics of pain.</td>
</tr>
<tr>
<td>Chronic PC</td>
<td>Advance frailty and decision making, Geriatric and PC service/HUSC.</td>
<td>Validation of Frail-VIG index and the framework for end-of-life decision making. Funding: Research Institute Instituto Carlos III.</td>
<td>One PhD project finished.</td>
</tr>
<tr>
<td>International cooperation</td>
<td>Primary Care Reference Group de la EAPC: ‘Core competencies expected in General Practitioners, in order to enhance access to and delivery of palliative care in primary care’.</td>
<td>Nominal group technique to identify the competencies of general practitioners in Europe. Organisation of the Catalan nominal group, elaboration of report with conclusions and list of identified competencies sent to the EAPC Taskforce.</td>
<td></td>
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</table>

EAPC, European Association for Palliative Care; HUSC, University Hospital of Santa Creu in Catalan; ICO, Catalan Institute of Oncology; MACA, Advanced Chronic Illness in Catalan; PADES, Home-support teams in Catalonia; PC, palliative care; UVIC, University of Vic.
After years of being focused in the care of patients with terminal cancer and devoted to train PC specialists, the master has changed its orientation in the last four editions towards the care of advanced chronic patients in the community, according to the development of new public health policy strategies in our context and the evidence of population PC needs. The attendants have diverse backgrounds such as primary care, geriatric services, internal medicine, oncology and nursing homes. The 14th edition of the Master started in October 2018 with new 46 students. Four members of the chair including a nurse and three physicians act as core coordinators of the project.

Postgraduate course on psychosocial and spiritual PC
This postgraduate course started in 2015 and was initially designed and implemented within the programme of la Caixa Foundation to train the psychologists and social workers of the programme. This postgraduate course has already completed four editions with a total number of 140 students, mainly psychologists and social workers, but also students from other healthcare disciplines, including nursing and medicine. The fifth edition of this postgraduate course starts in November 2018 with 21 new students. Three team members of the chair are involved in this project as coordinators, teachers and administrative support.

Pregraduate training, workshops and other courses
The chair is present at four different faculties providing pregraduate training. The recently (2017) created Faculty of Medicine at the University of Vic has prioritised the content of PC model of care in a mandatory topic in the second year called Social medicine and communication skills, and Palliative Care will be taught in the fourth year. Added to this, PC will be inserted as a topic in every specific organ issue (cardiology, pneumology, geriatrics and so on) as a transversal issue. Four physicians from the chair will be involved as teachers. The new project is a great opportunity to develop a full PC undergraduate curriculum, following international criteria and adding experience to existing national and international initiatives.18 19 This aim is very common in PC settings in the Spanish-speaking world, where tradition in high competitive research does not exist in our field.

Workshops and courses are usually built to address relevant topics with a pragmatic approach in diverse formats. The most active ones are focused on either advanced chronic care or ACP:

► Advanced chronic care:
  a. How to look after patients with advanced chronic conditions in health and social services and territories. This workshop (of 4–6 hours) has been performed 43 times in 5 years during the period 2012–2017, in seven different countries (Spain, Italy, Portugal, Argentina, Australia, Scotland and France). It is adapted to different settings and needs (‘How to improve palliative approach in your service’ for any kind of services), organisations (hospitals and multiservices organisations) or territories (‘How to improve palliative approach in your district’), bringing together all the organisations.
  b. MOOC Comprehensive and Integrated Care of People with Advanced chronic conditions (in Spanish): Disseminated through the Miriadax Platform. Five hundred and thirty-three professionals finished the first edition of the course (February–March 2017) and 441 answered the evaluation survey and 49% rated the course as 5 out of 5 regarding global satisfaction. A second edition of this course starts in November 2018.

► Advance care planning:
  a. This workshop of 4–6 hours was performed 17 times from 2014. It has been performed mostly in Spain and in different settings, mainly hospitals and primary care services, as well as in 14 conferences.
  b. Online course (in Catalan): this online course was elaborated in agreement with the Catalan Ministry of Health, mainly for professionals (primary care and social care) working into the community. It started in October 2016.
and it has been attended by a total number of 3780 professionals up to date, with a satisfaction of 8.4 out of 10.

c. **MOOC Advance Care Planning** (in Spanish): disseminated through the Miriadax Platform. A total of 505 professionals finished the first edition of the course (April–May 2018). From those who answered the final evaluation questionnaire (n=382), 57% rated the course as 5 out of 5 regarding global satisfaction.

### Research and transference of knowledge

Research aims at influencing policies and all types of organisations to implement measures of quality improvement for the care of people with advanced chronic conditions, with a public health vision. Research lines are focused on the epidemiology, clinics, organisation and ethical issues related to the so-called first transition at the end of life, and the psychosocial and spiritual care. We design and implement projects from a populational or individual perspectives, either observational or longitudinal, and focused in outcomes, quantitative, qualitative or mixed and in different settings.

The main partner has been the Catalan DoH, which has considered (and formally agreed) the CPC as a think-tank to evaluate the situation, identify areas and propose actions of improvement of PC in the Catalan Healthcare System. This link is especially relevant as it allows the CPC to influence decision making. Additionally, we have agreements with other organisations, both private and public, for knowledge transfer. The built partnerships show the respectful multidisciplinary partnership between PC, geriatrics, primary care, policy and managerial disciplines and the interdisciplinary partnership with professionals.

Main research projects developed from 2012 to 2018 are summarised in Table 2.

During the period 2012–June 2018, we have published a total of 59 articles and 6 books. Summary of key results on publications is shown in Figure 2, and full list of publications is available in the online supplementary appendix. Moreover, a total of 10 PhD theses were presented between 2016 and 2017, and 10...
more are currently under development, as described in table 3.

**DISCUSSION**

The experience of the UVic-UCC/ICO Chair of PC has been the first initiative of a specific PC chair in our country. PC and palliative medicine have a global challenge to be present in the academic field. Such challenge is particularly unresolved in Spain, where PC is not yet recognised as a medical specialty nor subspecialty.

The main topics developed at the chair of PC (palliative chronic care, psychosocial and spiritual care and involving society through compassionate communities) are aligned with the major challenges of PC in the 21st century. The impact of our initiatives and a summary of main outcomes is shown in table 4.

The model of PC academic institution that we have developed is an academic-mixed project, linking disciplines that have research background, has become a key factor in the absence of a funding policy for PC in contrast to those developed in other countries. As a result, we have been forced to orient our activities to those that could get specific funding.

The values, principles and the mission are based on the consideration of PC as a human right and advocacy to insert PC in all healthcare systems, with a great society involvement. These values are concreted in the public health and community perspectives as universal coverage (all patients, all settings and all countries), equity, quality, access and of sustainability. Added to this, the values of commitment to compassionate care, ethical approach and humanism, and the pragmatic view of producing real changes in care.

We identify the lack of competitive research projects and grants as one of our major weaknesses. Other areas of improvement have to do with assuring funding, sustainability, visibility and expansion. Future directions for this chair position include academic recognition and consolidation of the team. Additionally, this paper is descriptive and based in our own data. However, it shows a model of success in the development of education, research, knowledge transference, international cooperation and social programmes. We consider that the impact of the experience, although having some aspects difficult to measure, is quite relevant. Most initiatives developed have been innovative and have proposed effective models for PC improvement. According to the vision, the chair aims to be acknowledged as a beacon for innovation of PC, with public health and the right to PC perspectives as essential identity components. Moreover, we believe the experience described can support more widespread adoption by other institutions or healthcare systems, which could strengthen the popularisation of PC worldwide.
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Acknowledgements  We would like to express our deep gratitude to all the healthcare professionals and institutions that contributed to make this project possible.

Funding  The authors have not declared a specific grant for this research from any funding agency in the public, commercial or not-for-profit sectors.

Competing interests  None declared.

Patient consent  Not required.

Provenance and peer review  Not commissioned; externally peer reviewed.

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