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Developing an Interprofessional Palliative Care Curriculum to Train Future Health Professionals

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Abstract

Background: Given the growing number of chronic diseases that require interdisciplinary support, the needs and complex situations in palliative care (PC) are increasing. These phenomena also provide opportunities for pedagogical innovation. This study determined and defined the interprofessional PC core and profession-specific competencies that should be trained during the undergraduate interprofessional PC curriculum.

Methods: Taking advantage of the implementation of a new study plan at the Faculty of Medicine in Geneva, Switzerland, and the Geneva University of Health, a new interprofessional curriculum was designed. First, a working group, including experts in PC and pedagogy, was formed, and they worked on an interprofessional PC curriculum. Subsequently, the experts defined the curriculum with the specific subjects to be covered and the learning objectives. The final curriculum was operationalized into the following competencies: specific versus interprofessional. Furthermore, the experts determined the most appropriate teaching methods and integrated them into existing courses.

Results: To implement the curriculum, mobility between faculty members was encouraged, and an online platform was shared among them. This interprofessional curriculum integrates common and specific pedagogical objectives concerning the roles and responsibilities of each profession. Five frequent clinical situations, “clinical decision making”; “care plan respecting the values of the patient and his family”; “care of a dying patient”; “management of refractory symptoms”; and “supporting the caregivers,” were chosen to be the curriculum’s basis.

Conclusion: Emblematic clinical situations comprising the basis of the curriculum highlight the importance of clinical decision making, providing respectful end-of-life care, managing refractory symptoms, and supporting caregivers. This curriculum will prepare health care professionals to face the complex challenges of interdisciplinary PC by providing them with a shared palliative culture.

Keywords: curricular innovation; interprofessional education; palliative care

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Key Message

The curriculum demonstrates a commitment to clinical decision making, providing respectful end-of-life care, managing refractory symptoms, and supporting caregivers. This program will better prepare health care professionals (HCPs) to meet the complex challenges of interprofessional palliative care. It aims to create a common palliative culture among future HCPs.

Introduction

As life expectancy increases, the number of people living and dying with serious health-related suffering is expected to increase, particularly in people aged 70 years and above.^{1,2} Therefore, high-quality palliative care (PC) should be provided to improve the quality of life in this population.^{3,4} The educational system is not sufficiently focused on interprofessional care; therefore, opportunities to learn together are lacking.^{5,6} PC is an excellent model for preparing health care professionals (HCPs) to work effectively in an interprofessional team and ensure a holistic approach.⁷⁻¹⁰ Many organizations, such as the European Association for Palliative Care and the National Coalition for Hospice and Palliative Care (NPC), support the integration of PC education in the curriculum for HCPs.^{3,11,12} They emphasize the need to redesign HCPs' interprofessional education (IPE) with shared learning.^{13,14} Although many studies have been conducted to develop interprofessional curricula in PC, most have been conducted in the United States using various methods.¹⁵ Switzerland recently introduced the "Principal Relevant Objectives and Framework for Integrative Learning and Education in Switzerland" (PROFILES), a revised version of its national outcomes reference framework for the undergraduate medical curriculum.¹⁶ PROFILES is based on a set of competencies adapted from the CanMEDS (Canadian Medical Education Directions for Specialists) framework and nine entrustable professional activities (EPAs) that medicine students must be able to perform autonomously in the context of a predefined list of clinical situations. Two hundred and sixty-five generic clinical situations (situations as starting points or SSPs) that cover the common symptoms, complaints, and findings that a resident should be able to manage with respect to all age groups and in any type of setting were also included, including six PC situations.¹⁶ Furthermore, the new 2022 study plan framework of the School of Health Sciences offers the opportunity to potentiate competencies in this field and thus contribute to the development of interprofessional competencies through anchoring in complex and palliative situations.

In this context, as the literature on this topic is quite heterogeneous in the PC domain and does not reflect PC practice in Switzerland, this study aimed to determine and define the interprofessional PC core competencies and profession-specific competencies that should be trained during the undergraduate interprofessional PC curriculum.^{7,17}

Methods

Accordingly, an interprofessional curriculum in PC was designed and sustained across the medical faculty of the University of Geneva (bachelor's and master's degrees) and the School of Health Sciences (bachelor's degree) and adapted through different years of education. The development of the curriculum was based on two frameworks. Donesky et al. used the characteristics that constitute excellence in postlicensure interprofessional PC education.¹⁸ In this project, only the following characteristics were used: competencies, content, and educational strategies, with a strong focus on competencies. Regarding the educational strategies, the "impact practice" model helped in the conceptualization of various teaching methods.⁶

The project was divided into three parts as follows:

1. Creating an interprofessional working group across the School of Health Science and medical faculty.
2. Definition of the interprofessional curriculum of PC according to different steps based on Donesky et al. (2020).
 - a Identification of all CanMEDS competencies, EPAs, and SSPs that cover the PC field.
 - b Definitions of five frequent clinical situations related to the content characteristics of Donesky et al. (2020).
 - c Definition of common transversal and specific competencies for each clinical situation. Competencies were defined in accordance with the national guidelines in PC and with the NPC document^{3,19} as they were the main focus of curriculum development.
3. Implementation of the curriculum: we determined competencies that should be trained in interprofessional groups and those that could be integrated into the existing monoprofessional training, as well as the sessions that should be added. Finally, we determined the most appropriate teaching method. As the curricula are already dense, the main aim was to implement interprofessional learning in existing clinical training to reduce the subject load as much as possible.



Results

Creation of the working group

Members of the working groups included a physician specialist in PC, an associate professor at the medical faculty at the University of Geneva; two nurse lecturers with master's degrees in the field of nursing; one lecturer in the field of nutrition and dietetics with an MBA; and a lecturer in physiotherapy with expertise in clinical PC.

Definition of the interprofessional curriculum of PC

The first step consisted of summarizing all CanMEDS competencies, EPAs, and SSPs that cover the PC field, as described in Table 1.

The second step consisted of agreeing on five different frequent clinical situations, “clinical decision making,” “care plan respecting the values of the patient and his family,” “care of a dying patient,” “management of refractory symptoms,” and “supporting the caregivers.” These topics were issued from the SSPs: SSP 228 caregivers’ fatigue, loss of energy, SSP 229 change in treatment goals and end-of-life decisions, SSP 230 holistic care of the dying patient, and SSP 231 management of refractory symptoms (pain, nausea) and the general objective 1.9: to establish a patient-centered, shared management plan and deliver high-quality cost-effective preventive and curative care, especially when dealing with vulnerable and/or multimorbid (elderly) or terminally ill patients.

Table 1. Summary of All the CanMEDS Competencies, Entrustable Professional Activities, and Situations as Starting Points in Palliative Care Fields

CanMEDS competencies	<ol style="list-style-type: none"> 1. GO 1.9: establish a patient-centered, shared management plan and deliver high-quality cost-effective preventive and curative care, especially when dealing with patients who are vulnerable, multimorbid (elderly), or who suffer from a terminal illness 2. GO 1.13: advice and counsel patients on their health and lifestyle in an empathetic nonjudgmental manner. Perform motivational interviews 3. GO 1.14: set up and conduct discussions with the family/caregivers and manage options/decisions regarding the patient’s health, condition, and outcomes 4. GO.1.21: comply with the code of ethics and recommendations of the Swiss Academy of Medical Sciences 5. GO 1.22: take Swiss legislation into account in the care of the patients, in particular coverage for disease, accidents, occupational disease, and disability, display awareness and respect for the rights of the patient 6. GO 2.2: accurately and adequately convey relevant information and explanations to patients, families, colleagues, and other professionals, foster a common understanding of issues and problems, and jointly develop a health care plan 7. GO 2.3: manage disagreements and emotionally charged conversations 8. GO 2.6: share bad news with patients and their families appropriately (“breaking bad news”) 9. GO 7.1: display integrity, honesty, commitment, empathy, and accountability while taking care of patients and communicating with families and colleagues 10. GO 7.4: show awareness of cultural, societal, and spiritual/religious issues that impact the health and delivery of care to individuals and the community
Situations as starting points	<ol style="list-style-type: none"> 11. SSP 228: caregivers’ fatigue, loss of energy 12. SSP 229: change in treatment goals and end-of-life decisions 13. SSP 230: holistic care of the dying patient 14. SSP 231: management of refractory symptoms (pain, nausea) 15. SSP 232: need for psychosocial and spiritual support of all involved individuals 16. SSP 254: patient with other cultural backgrounds, migration
Entrustable professional activities	<ol style="list-style-type: none"> 17. EPA 1.6: assess gender, social, cultural, and other factors that may influence the patient’s perception and description of symptoms, demonstrate cultural awareness and humility, and be conscious of the potential for bias in interactions with the patient 18. EPA 7.3: adopt a shared decision-making approach in establishing the management plan; consider patients’ preferences while making orders; consider an indication or request for complementary medicine; deal with treatment refusal; demonstrate an understanding of the patient’s and family’s current situation, beliefs, and wishes; consider any physical dependence or cognitive disorders; react appropriately when the patient lacks autonomous decision-making capacity 19. EPA 7.6: understand and apply the concept and basic elements of advance care planning 20. EPA 7.14: ensure continuity and interprofessional collaboration in caring for chronic and multimorbid patients 21. EPA 7.16: prescribe measures for treatment of pain, palliative, and end-of-life care while considering any advance directives or a “do not resuscitate” request 22. EPA 8.5: provide an accurate, concise, relevant, and well-organized oral presentation of a patient encounter and situation, adjusting it to the profile and role of the recipient, elicit feedback about the handover, especially when assuming responsibility for the patients and ask for clarification if needed

EPAs, entrustable professional activities; SSPs, situations as starting points.



The third step involved defining the common transversal competencies within the working group for each clinical situation. The aim was to have, by the end, all competencies described to meet different topics. A table presenting all core competencies for PC and specific competencies for each profession regarding the five emblematic situations was created (Table 2).

Finally, the specific competencies of each profession were defined. The final document was shared with one collaborator from each of the following professions: medicine, dietician, nurse, and physiotherapist over two rounds (Table 3). For example, in an interprofessional care plan for a patient, all competencies needed by all HCPs were defined, and profession-specific competencies were described.

Implementation of the curriculum

First, the content of each curriculum in each discipline was scrutinized to highlight missing topics and opportunities for integrating PC into existing courses.

Second, the competencies that should be trained in interprofessional groups or in monoprofessional training were determined. Decisions regarding the sessions to be added were made, and the most appropriate teaching method was determined.

The selected teaching methods included interprofessional courses, seminars, and simulations. Interfaculty-shared clinical scenarios were used in this study. Interfaculty simulation involves students participating in a simulation in which they were presented with an interprofessional conflict (e.g., how to deal with the divergence of opinions among professionals on how to provide the best PC in specific situations). Students were required to negotiate with other students from other disciplines who had different perspectives regarding the care plan for a patient. A group debriefing following the simulation provided the students with a structured approach to conflict resolution. A debriefing with the instructors was conducted at the end of the session to gather feedback on how the students resolved conflicts using specific and shared competencies (e.g., a patient with advanced gastric cancer who wants to die at home). Finally, a shared platform allowed faculty members to share documents and courses and make them available to every faculty member through an informatic platform. Furthermore, teachers had intrafaculty mobility.

Discussion

A major strength of this interprofessional PC curriculum is that it is intrafaculty and longitudinally integrated

into the undergraduate years of study. The second strength is its interprofessional development. We have taken advantage of opportunities for change in the medical faculty with the introduction of profiles and the new 2022 study plan framework of the School of Health Sciences.¹¹ Third, we have the advantage of having a lot of material already available as guidelines or expert advice, such as the NPC guidelines, to integrate PC to build a high-quality curriculum.¹¹ Furthermore, most members of our working group have mixed profiles and are able to link patient education with clinical care. Finally, the Geneva Interprofessional Simulation Center, established in 2013, offers IPE through simulation to medical, pharmacy, nursing, nutrition, physiotherapy, midwifery, and technology in medical radiology students together.²² This innovative model provides students with team-based principles, enabling them to model and promote the value of each profession.

During the implementation of such a curriculum, different organizational challenges (number of students, common calendar, and dense timetable of students) were faced; however, at the end of their study, students should acquire knowledge that is relevant to all health professionals and skills that are essential for interprofessional collaboration and teamwork to take care of complex patients in different settings.

The main limitation of this study was that the project was initiated without social workers or chaplains. The final document will be further improved and edited according to the suggestions of all faculty members involved in student training on this topic.

Different next steps are scheduled to take place in the next few years. First, the increase in the number of HCPs in the working group had a greater impact on the interprofessional PC curriculum. Integrating more colleagues from the same discipline but also involving colleagues from other disciplines, such as social workers, chaplains, midwives, and radiology technicians, is needed. Students from the Faculty of Pharmacy may also join the working group. Therefore, creating new clinical situations adapted for midwives and social workers is crucial. Second, more visibility and sustainability to this initiative must be provided. With this curriculum, faculty members will apply at the beginning of the next year to become the first interfaculty competence center in PC in Western Switzerland. Third, the involvement of health professional students in the group is an important step toward better adapting the curriculum to the needs of students.



Table 2. Interprofessional Palliative Care Curriculum: Expected Competencies; Entrustable Professional Activities: Faculty of Medicine, Nursing, Dietary, and Physiotherapy

Clinical themes/situations	Profile	Expected competencies (to be able to)
Decision making Care plan Respect patient's and their family's values/choices Breaking bad news For example: Patient with advanced oncological disease who does not respond to oncological treatment or recurs Patient with COPD or severe heart failure who is hospitalized >3 times/year for acute decompensation Announcement of a diagnosis of amyotrophic lateral sclerosis Preparation for discharge	<p>Establish a patient-centered shared management plan and deliver high-quality cost-effective preventive and curative care, especially when confronted with a vulnerable and/or polymorbid (elderly) patient, or suffering from terminal illness (canMED medexp 1.9)</p> <p>Incorporate and apply the foundation of biomedical and clinical ethics in the care of patients; respect values such as autonomy and dignity and cultural backgrounds; identify and weigh, in situations posing ethical dilemma, the various options available and how principles and values potentially affect them (canMED medexp 1.19)</p> <p>Share bad news with patients and their families appropriately ("breaking bad news") (canMED comm2.6)</p> <p>Recognize that the patient's wishes and preferences are central for medical decision making ("shared decision principle") (canMED prof7.5)</p> <p>In establishing the management plan, use a shared decision approach: consider patients' preferences that will underpin the orders being provided, deal with treatment refusal, demonstrate an understanding of the patient's and their family's current condition and representations, and consider the occurrence of physical dependence or cognitive disorders (EPA management 7.3)</p> <p>Ensure continuity and interprofessional collaboration in taking care of chronic and polymorbid patients (EPA management 7.13)</p> <p>Change in treatment goals and end-of-life decision (SSP 229)</p>	<ul style="list-style-type: none"> - Know the issues related to diagnostics - Identify different treatment or management options and related dilemmas - Identify the needs/expectations/preferences of patients/relatives with sensitivity to cross-cultural issues, life history, dignity, spirituality, hope, quality of life, and values of patients - Promote a partnership relationship with the patient/relatives and involve them in all decision making - Address people's informed decisions about the level of information they wish to receive and facilitate the sharing of this choice with patients/relatives - Know the requirements for breaking bad news to patients/relatives and the different steps - Participate in and/or conduct a meeting with the patient/relatives - Communicate relevant, concise, clear, and timely information between team members, including the patient/relatives - Share, plan, and coordinate interventions with other professionals; establish and refer to leadership (designated, situational, or shared) - Interprofessionally determine care priorities - Define with the patient/relatives/professionals the desired place of care and death - Understand the relevance of advanced care planning - Know the legal basis for advance directives and challenges associated with them - Know the resources of the primary care and specialized palliative care network, in particular to encourage patients to stay at home - Know the main ethical principles that are specifically related to palliative care (e.g., autonomy; refusal of care)
Decision making Care plan Respect patient's and their family's values/choices Breaking bad news For example: Patient with advanced oncological disease who does not respond to oncological treatment or recurs	<p>Establish a medical prescription for nonresuscitation or nonadmission (e.g., to intensive care or no transfer to emergency) after discussion between professionals and patient/relatives</p> <p>Know the issues when dealing with a patient who refuses care</p>	<p>Develop resources and tools to assist with food planning and maintaining quality of life of the patient/carer</p> <p>Propose and adapt the patient's management according to the decisions and care plan, giving priority to the patient's comfort</p>
Decision making Care plan Respect patient's and their family's values/choices Breaking bad news For example: Patient with advanced oncological disease who does not respond to oncological treatment or recurs	<p>Representing and defending the wishes and preferences of patients/relatives as central to the care process in partnership (advocacy concept)</p> <p>To be involved in the decision-making process by providing clinical expertise based on the assessment with the patient and/or his/her relatives of the:</p>	<p>Position themselves in the interprofessional team in decision making</p> <p>Propose and adapt the patient's management according to the decisions and care plan, giving priority to the patient's comfort</p>
	<p>Specific medical competencies</p>	<p>Specific dietician competencies</p>
	<p>Specific nursing competencies</p>	<p>Specific physiotherapist competencies</p>



Table 2. Continued.

Clinical themes/situations	Specific medical competencies	Specific nursing competencies	Specific dietitian competencies	Specific physiotherapist competencies
<p>Patient with COPD or severe heart failure who is hospitalized >3 times/year for acute decompensation</p> <p>Announcement of a diagnosis of amyotrophic lateral sclerosis</p> <p>Preparation for discharge</p>		<ul style="list-style-type: none"> – degree of discomfort caused by the current problem – degree of discomfort of the patient – the benefits and drawbacks of the therapeutic project – the wishes and choices of the patient/relatives <p>Propose tools and/or indicators that allow the impact of the therapeutic attitude on the patient's quality of life to be reassessed</p> <p>To welcome the expression of emotions in daily life and to accompany the patient and his/her family at their own pace in their existential journey</p>		
Clinical themes/situations	Profile	Expected competencies (to be able to)		
<p>End-of-life patient at home or hospital</p> <p>For example:</p> <p>Patient with oncological, respiratory, cardiac, or cerebrovascular disease</p>	<p>Take history from severely ill or dying patients (EPA history)</p> <p>Recognize the signs of imminent death (EPA status 2.7)</p> <p>Clinical diagnosis of death, estimation of time of death (EPA status)</p> <p>Holistic care of dying patient (SSPS 230)</p> <p>Counsel patient and family proactively on decision making at the end of life and support the definition of patients' preferences and acceptable outcomes; associate chaplain if needed or/and consult with ethicist in difficult situations (EPA management 7.14)</p>	<ul style="list-style-type: none"> – Recognize the warning signs of a patient's end of life – Know how to apply advance decisions in the interprofessional team in partnership with the patient and his/her relatives – Participate in the management of the main symptoms at the end of life (pain, agitation, congestion) – Know the issues related to the introduction, cessation, or continuation of certain treatments, hydration, and artificial feeding – Know the legal basis and the ethical challenges and dilemmas related to assisted suicide and euthanasia – Define the roles, responsibilities, and allocation of interventions in these particular circumstances (who to call when?) 		
Clinical themes/situations	Specific medical competencies	Specific nursing competencies	Specific dietitian competencies	Specific physiotherapist competencies
<p>End-of-life patient at home or hospital</p> <p>For example:</p> <p>Patient with oncological, respiratory, cardiac, or cerebrovascular disease</p>	<p>Fill out a death certificate</p> <p>Announce the death to relatives</p> <p>Use the main treatments for the management of symptoms (pain, agitation, congestion)</p> <p>Know how to state the benefits and undesirable effects of artificial nutrition or hydration</p> <p>Know how to negotiate with relatives' request for an autopsy</p> <p>Know the steps to take after a death</p>	<p>Adapt and arrange the patient's environment to promote their comfort and well-being by involving their relatives, considering their psychological and temporal availability</p> <p>Referring patients and relatives to resource persons for pre- or postmortem procedures</p> <p>Planning/administering and evaluating the benefits/side effects of the treatments administered</p>		<p>Know how to use specific techniques for analgesic purposes</p> <p>Know how to use specific techniques for bronchial decongestion</p>



Clinical themes/situations	Profile	Expected competencies (to be able to)
Management of more or less refractory symptoms/disturbing and dominant	When appropriate, prescribe measures in treatment of pain, palliative, and end-of-life care, considering, when asked for or formerly specified by the patient, advance directives or a “do not resuscitate” order (EPA management 7.15)	<p>Know how to use the main symptom assessment tools (e.g., Edmonton Symptom Assessment System, Borg scale for dyspnea, hospital anxiety depression scale and geriatric depression scale for depression, confusion assessment method, and mini-mental status examination for cognitive disorders)</p> <p>Know the main principles of symptom management global assessment</p> <ul style="list-style-type: none"> – targeted clinical examination – complementary examinations if appropriate – identification of the etiology – etiological and symptomatic management according to good practice guidelines <p>Alleviate the symptoms presented by patients according to the anticipated care plan which considers the preferences/wishes of the patient/relatives</p> <p>Supporting patients in an active life and their plans by promoting their quality of life</p> <p>Understand the different physical, psychological, sociocultural, spiritual, existential, and material dimensions that might affect patients/relatives</p> <p>Know the challenges related to and how to accompany, in a targeted way, patients with acute or chronic cognitive disorders</p> <p>To be aware of complementary approaches (hypnosis, massage) and to be able to propose them to the patient</p>
Clinical themes/situations		
Management of more or less refractory symptoms/disturbing and dominant	<p>Know the definitions of the different symptoms and their prevalence in this population</p> <p>Know the pathophysiology of the main symptoms</p> <p>Know the main aetiologies related to the symptoms and recognize their importance in the management of the symptoms</p> <p>Know the recommendations of good practice related to the management of these symptoms</p> <p>Know the resources to call in case of refractory symptoms (e.g., mobile palliative care teams)</p> <p>Obtain informed consent from the patient or therapeutic representative for the proposed treatment</p> <p>Manage refusal of treatment and propose alternatives</p> <p>Engage in an ethical discussion when palliative sedation is proposed</p> <p>Recognize the importance of Reinforce information and support for patients and their families in relation to specific efforts of proposed complementary examinations and treatments</p> <p>Coordinate and federate within</p>	<p>Specific medical competencies</p> <p>Know the pathophysiology of the main symptoms and intervene as needed = hydration and electrolyte concept, blood sugar support, trace elements, vitamins, etc.</p> <p>Know how to collect data, e.g., symptomatology, complaints, and needs of patients to establish a nutritional intervention plan</p> <p>Specific nursing competencies</p> <p>Know the pathophysiology of the main symptoms and intervene as needed = hydration and electrolyte concept, blood sugar support, trace elements, vitamins, etc.</p> <p>Know how to collect data, e.g., symptomatology, complaints, and needs of patients to establish a nutritional intervention plan</p> <p>Specific dietitian competencies</p> <p>Know the pathophysiology of the main symptoms and intervene as needed = hydration and electrolyte concept, blood sugar support, trace elements, vitamins, etc.</p> <p>Know how to collect data, e.g., symptomatology, complaints, and needs of patients to establish a nutritional intervention plan</p> <p>Specific physiotherapist competencies</p> <p>Use pathophysiological knowledge of the main symptoms and adapt the intervention according to the context</p> <p>Collect data (e.g., symptomatology, complaints, and needs of patients) to establish an optimal physiotherapeutic intervention plan in accordance with the patient's values</p>



Table 2. Continued.

Clinical themes/situations	Specific medical competencies	Specific nursing competencies	Specific dietitian competencies	Specific physiotherapist competencies
	<p>Know how to use the main treatments to relieve the most common symptoms</p> <p>Know the definition of palliative sedation</p>	<p>the team a shared care plan</p> <p>Plan/administer drug treatments considering safety criteria: 6B rule</p> <p>Evaluate the effectiveness of the treatment</p> <p>Manage side effects/risks of administered treatments</p> <p>Ensure holistic care with reference to one or more nursing models/theories that consider the physical and emotional comfort of the patient and relatives to optimize their well-being</p>		
Pain	<p>Know how to differentiate between chronic and acute nociceptive and neuropathic pain</p> <p>Be able to assess them: qualify and quantify them and use the PQRSTUI investigator method</p> <p>Integrate the concept of total pain in holistic and interprofessional care</p> <p>Know some specific evaluation tools for self and hetero evaluation</p> <p>Know the different types of analgesics, their benefits, and their main side effects</p> <p>Propose and coordinate an interprofessional approach to pain and nonmedicinal therapies</p> <p>Consider individual representations and cultural aspects related to pain</p> <p>Know the treatments for neuropathic pain</p> <p>Know how to prescribe an opiate and associated treatments</p>		<p>To know and qualify pain: according to the site, intensity (acute/chronic), and temporality</p> <p>Know how to measure the impact of pain on food intake and hydration</p> <ul style="list-style-type: none"> – Hypo or hyperphagia – Energy density – Texture, etc. <p>Know the impact of the different classes of analgesics and the mechanisms of action (molecules and excipients) on the digestive system (constipation, fecal impaction, diarrhea, bloating, meteorism, etc.)</p>	<p>Knowing how to differentiate the different types of pain (nociceptive, central neurogenic, etc.)</p> <p>Qualify and quantify pain: according to the site and intensity (acute/chronic), and temporality</p> <p>Know how to measure the impact of pain on the person and adapt the physiotherapeutic treatment accordingly</p> <p>To know the impact of the different classes of analgesics on the mechanisms of action of the locomotor, respiratory, and neuromuscular systems</p>
Nausea–vomiting	<p>Know the potentially treatable etiologies (e.g., hypercalcemia; constipation)</p> <p>Know the main classes of antiemetics, their mechanism of action, and side effects</p>	<p>Identify the impact of pain on the management of daily life with the patient and their relatives</p> <p>Gather perceptions of the impact of pain from the various members of the team</p> <p>Propose and implement specific nonpharmacological and supportive interventions aimed at optimizing the quality of life of the patient and their relatives</p> <p>Welcome the experience of pain and the meaning given by the patient and respect their wishes</p> <p>Determine and set up, in collaboration with others, the patient's ration formulas</p>	<p>Knowing the nutritional treatments according to the etiology:</p> <ul style="list-style-type: none"> – Digestive sparing: choice of highly digestible food and preparation – Hydration/electrolytes and rehydration formulas 	<p>Know the consequences of nausea and vomiting on the respiratory system and propose appropriate interventions (positioning, etc.)</p>



Table 2. Continued.

Clinical themes/situations	Specific medical competencies	Specific nursing competencies	Specific dietitian competencies	Specific physiotherapist competencies
		<p>personalized feeding methods (taste, quantity, texture, quality, rhythm, etc.)</p> <p>Evaluate the oral condition and implement appropriate and individualized interventions</p> <p>Create an environment (air, positioning, odors) that reduces this symptomatology</p> <p>Participate in the analysis and discussion/reassessment of the introduction, maintenance, or withdrawal of artificial feeding and hydration</p> <p>Distinguish one's relationship and representations related to feeding/hydration from those of the patient and their relatives in order to focus on the patient's choices</p> <p>Be part of an accompaniment of relatives that is coherent with the choices and decisions of the patient related to feeding arrangements</p> <p>Implement comfort measures appropriate to the patient's particular situation</p>	<p>– Cutting ketogenesis: "light" foods, carbohydrate foods -Split feeding into small amounts, cold foods, flavored ice cubes</p> <p>Foods and drinks that can be used as antiemetics</p>	
Dyspnea	<p>Know the potentially treatable etiologies (e.g., cardiac I; pulmonary infection, anemia)</p> <p>Know the links between dyspnea and anxiety</p> <p>Know the role of oxygen, corticosteroids, and morphine in the management of dyspnea</p>	<p>Assess clinical/paraclinical status and patient experience</p> <p>Consider the impact of dyspnea on anxiety and vice versa</p> <p>Implement appropriate measures in interprofessional collaboration (O₂, aerosol positioning, breathing techniques, non-pharmacological interventions)</p> <p>Evaluate the naso oral status and implement appropriate and individualized interventions</p> <p>Create an environment (air, positioning) that reduces this symptomatology</p>	<p>Know the different nutritional interventions available:</p> <p>– Split feeding small amounts, cold food, easy to digest</p> <p>– Monitor the patient's nutritional status: body composition (obesity/lack of weight)</p> <p>– increase metabolism</p> <p>– decrease food intake</p> <p>– influence of drug treatments such as corticosteroids and opiates</p>	<p>Master the different physiotherapeutic interventions related to dyspnea</p> <p>Adapt the duration/intensity/frequency of treatment</p>



Table 2. Continued.

Clinical themes/situations	Specific medical competencies	Specific nursing competencies	Specific dietitian competencies	Specific physiotherapist competencies
Anxiety	<p>Support relatives and carers in managing the discomfort and anxiety caused by these symptoms</p> <p>Recognize the discomfort generated by dyspnea and the associated feeling of finiteness, and ask for help from resource persons</p> <p>Know the different medications for anxiety, the benefits and side effects particularly in this population</p> <p>Recognize the importance of all nondrug treatments in this population</p> <p>Discuss with the patient the drug and nondrug therapies that can be offered to prescribe the appropriate treatment for their choices</p> <p>Assess the patient's state of anxiety and welcome the manifestations of this state in the care</p> <p>Consider the experiences of relatives as a possible contributor to the patient's emotional state</p> <p>Identify and respect the patient's coping strategies</p> <p>Create an environment that promotes a calming climate</p> <p>Recognize one's own level of anxiety and representations related to food/hydration from those of the patient and their relatives to focus on the patient's choices</p> <p>Support relatives in a way that is consistent with the patient's choices and decisions regarding nutrition</p> <p>Implement comfort measures appropriate to the patient's particular situation</p>	<p>Support relatives and carers in managing the discomfort and anxiety caused by these symptoms</p> <p>Recognize the discomfort generated by dyspnea and the associated feeling of finiteness, and ask for help from resource persons</p> <p>Know the nutritional consequences of the symptom and its treatment:</p> <ul style="list-style-type: none"> - in relation to strength, fatigue, and functional capacity - loss of control over eating - risk of increased intake = estimate risks/benefits <p>Respect patient's desires = estimate risks/benefits</p>	<p>Use and adapt physiotherapeutic interventions to reduce anxiety</p> <p>Adapt communication and relationship to these particular situations</p>	



Table 2. Continued.

Clinical themes/situations	Specific medical competencies	Specific nursing competencies	Specific dietitian competencies	Specific physiotherapist competencies
Cachexia	<p>Know the different stages of cachexia and the therapeutic measures that can be used</p> <p>Know the benefits and adverse effects of artificial feeding and hydration</p> <p>Know the definition, the different stages of cachexia, and the therapeutic measures that can be implemented</p> <p>Carry out screening for a risk of undernutrition or proven undernutrition based on validated assessment tools</p> <p>Evaluation grid of the oral condition</p> <p>Propose a treatment plan that considers the patient's individuality and the situation by analyzing the problem, defining objectives, and developing nutritional strategies in collaboration with nutritionists</p> <p>Be able to consider the symbolic representations and values of food and hydration</p> <p>Know how to prescribe artificial nutrition and feeding</p> <p>Know the benefits and side effects of orexigenic treatments</p>	<p>Assess oral status, prevent complications, and perform oral care</p> <p>Evaluate skin condition and prevent complications</p> <p>Implement comfort measures appropriate to the patient's particular situation</p> <p>Adapt the environment to the patient's situation: positioning and changing support points, bed, adapted equipment, etc.</p> <p>Being an actor in the decision-making process by communicating the benefits and risks of the interventions envisaged and/or implemented</p> <p>Involve and accompany the patient in decision making with reference to their wishes</p>	<p>Know and implement dietary measures adapted to each stage of cachexia and to the patient's prognosis</p> <p>Consider early satiety</p> <p>Know and estimate the risk of undesirable effects of food (metabolic limits, digestive/abdominal pain)</p>	<p>Implement physiotherapeutic measures, such as mobilization and comfort positioning, appropriate to the treatment of the cachexic patient and the patient's prognosis</p>
Delirium	<p>Know the potentially treatable etiologies (e.g., hypercalcemia, medication)</p> <p>Know the hypo and hyperactive delirium</p> <p>Know the role of predisposing factors to delirium (age, sensory deprivation, etc.) and the implementation of prevention measures</p> <p>Know the impact of delirium on family members and care teams</p> <p>Assess the implementation of restraint measures through a prior and individualized ethical reflection</p> <p>Prescribe appropriate treatments</p> <p>Regularly assess and reassess the patient's confusional state</p>	<p>Hydration (clear urine)</p> <p>Hypo- and hyperglycemia</p> <p>Electrolyte monitoring: hypo-hypernatremia/calcemia /magnesium/kalemia</p>	<p>Adapt treatment and relationship/communication to the patient's confused state</p>	



Table 2. Continued.

Clinical themes/situations	Specific medical competencies	Specific nursing competencies	Specific dietitian competencies	Specific physiotherapist competencies
		<p>using validated scales (CAM) and clinical examination</p> <p>Identify the multidimensional causes of this state</p> <p>Understand the variability of the confusional state and seize the moments of lucidity to favor interactions</p> <p>Welcome the manifestations of this state and adapt interventions that promote reaffirmation by involving family members</p> <p>Recognize that one's own experiences and reactions to confusion have an impact on the interpretations given to these manifestations</p> <p>Create an environment that favors a climate of calm and reassurance by setting up reference points (temporospatial and people present)</p>		
Clinical themes/situations	Profile	Expected competencies (to be able to)		
Support of caregivers	Caregivers' fatigue, loss of energy (SSP 228)	<p>Know the main tools for assessing the burdens of relatives (Zarit; mini Zarit; CRA)</p> <p>Know the resources available for the support of relatives (internal or external; support; spiritual; organizational)</p> <p>Value the resources provided by relatives and integrate them into the care plan</p> <p>Provide a space for relatives to talk</p>		
Clinical themes/situations	Specific medical competencies	Specific nursing competencies	Specific dietitian competencies	Specific physiotherapist competencies
Support for caregivers		<p>Transmit to the relatives the information relating to the patient's situation and its evaluation, referring to the patient's wishes, their advance directives, and the legislative framework in force</p> <p>Evaluate and reevaluate with the family member their understanding, representations, and</p>		<p>Discuss the specific role of the physiotherapist with the carer and the patient as required</p> <p>Teach techniques to facilitate handling and/or decluttering to the carer</p>



Table 2. Continued.

Clinical themes/situations	Specific medical competencies	Specific nursing competencies	Specific dietitian competencies	Specific physiotherapist competencies
		<p>psychoemotional process^{20,21} in the situation to create a therapeutic alliance</p> <p>Integrate relatives into a holistic care process by referring to one or more nursing models/theories while respecting their resources, their limits, and their availability</p> <p>Identify the impact of symptoms on the management of the patient's daily life with their relatives</p> <p>Be part of an accompaniment of relatives that is coherent with the patient's choices and decisions in the management of symptoms and the lived experience</p> <p>Welcome the emotional state and fatigue of the family member and accompany them in their limits and requests for help</p>		
Clinical themes/situations	Profile	Expected competencies (to be able to)		
Psychosocial and spiritual support	Psychosocial and spiritual support (SSP 232)	<p>Encourage expression and be able to accommodate the expectations/needs of patients and relatives in an open manner</p> <p>Be particularly attentive to spiritual aspects</p> <p>Know how to call on resource persons, such as chaplains</p> <p>Be aware of one's own limitations and finiteness</p>		



Table 3. SWOT: Strength, Weakness, Opportunity, Threat: Related to the Implementation of IPE in Palliative Care in Geneva

Strengths	Weaknesses
<ul style="list-style-type: none"> • Interprofessionality in content within PC interprofessional curriculum • Shared teaching • PC in interprofessional simulation device at interprofessional simulation center • Enlarged PC content suitable for continuous education and for training practitioner 	<ul style="list-style-type: none"> • Strong tendency to work within uni professional silo • General lack of knowledge within teacher board regarding PC inter-professional curriculum • Lack of comprehension of particularity of PC interprofessional curriculum with regard to other faculties
Opportunities	Threat
<ul style="list-style-type: none"> • Interprofessional curriculum enlarged into a process within Health Science School and medical faculty • PC interprofessional curriculum enlarged to social work faculty 	<ul style="list-style-type: none"> • Lack of communication and coordination between professionals and faculties • Lack of interest within teaching profession body regarding PC inter-professional curriculum

Indeed, the assessment of students in interprofessional sessions was positive; however, further improvements are necessary to develop better assessment methods to demonstrate that this curriculum can improve patient care.

Conclusion

The use of frequent or stressful generic patient situations that cover the common circumstances, symptoms, complaints, and findings that HCPs should be able to manage after their studies and develop the competencies that each HCP should have to manage a patient presenting with any of these situations in a well-structured way should be very promising and assist students in developing an interprofessional perspective. The faculty and teachers intend to use the curriculum to illustrate lectures, engage in problem-based learning sessions, and facilitate bedside teaching. The curriculum provides an understanding of the expertise of other professions and increases knowledge of PC.

Author's Contribution

F.D., P.B., P.R., and S.P. participated in the conceptualisation, formal analysis, methodology, supervision, validation, visualisation, writing—original draft, and writing—review and editing. All authors have read and agreed to the published version of the manuscript.

Author Disclosure Statement

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Abbreviations Used

- COPD = chronic obstructive disease
EPA = entrustable professional activities
HCPs = health care professionals
NPC = National Coalition for Hospice and Palliative Care
PC = palliative care
PROFILES = Principal Relevant Objectives and Framework for Integrative Learning and Education in Switzerland
SSPs = situations as starting points style

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