

Educational needs of health care providers working in long-term care facilities with regard to pain management

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BACKGROUND: The prevalence of chronic pain ranges from 40% to 80% in long-term care facilities (LTCF), with the highest proportion being found among older adults and residents with dementia. Unfortunately, pain in older adults is underdiagnosed, undertreated, inadequately treated or not treated at all. A solution to this problem would be to provide effective and innovative interdisciplinary continuing education to health care providers (HCPs).

OBJECTIVE: To identify the educational needs of HCPs working in LTCF with regard to pain management.

METHODS: A qualitative research design using the nominal group technique was undertaken. Seventy-two HCPs (21 physicians/pharmacists, 15 occupational/physical therapists, 24 nurses and 21 orderlies) were recruited from three LTCF in Quebec. Each participant was asked to provide and prioritize a list of the most important topics to be addressed within a continuing education program on chronic pain management in LTCF.

RESULTS: Forty topics were generated across all groups, and six specific topics were common to at least three out of the four HCP groups. Educational need in pain assessment was ranked the highest by all groups. Other highly rated topics included pharmacological treatment of pain, pain neurophysiology, nonpharmacological treatments and how to distinguish pain expression from other behaviours.

CONCLUSION: The present study showed that despite an average of more than 10 years of work experience in LTCF, HCPs have significant educational needs in pain management, especially pain assessment. These results will help in the development of a comprehensive pain management educational program for HCPs in LTCF.

Key Words: *Continuing education; Educational needs; Long-term care facilities; Nursing homes; Older persons; Pain management*

The prevalence of chronic pain among community-dwelling older adults is estimated to be between 27% and 57% (1-3) and has been reported to be even higher in those residing in long-term care facilities (LTCF) (1,4,5). Although the exact percentage is difficult to determine given the difficulties in communication encountered with many residents, studies report point prevalence of pain ranging from 40% to 80% (6,7), with the highest proportion being found among very old residents with dementia (8-10).

Many factors may contribute to higher rates of chronic pain in older adults, including intrinsic factors related to aging. The prevalence and severity of several degenerative diseases associated with pain, such as osteoarthritis and other musculoskeletal pathologies, increase with age

Les besoins de formation sur la prise en charge de la douleur de la part des dispensateurs de soins qui travaillent dans des établissements de longue durée

HISTORIQUE : La prévalence de douleur chronique varie de 40 % à 80 % dans les établissements de soins de longue durée (ÉSLD), la proportion la plus élevée s'observant chez les adultes âgés et les résidents atteints de démence. Malheureusement, la douleur est sous-diagnostiquée, sous-traitée, traitée de manière inadéquate ou pas traitée du tout chez les adultes âgés. Une solution consisterait à prodiguer aux dispensateurs de soins (DdS) une formation interdisciplinaire continue efficace et novatrice.

OBJECTIF : Déterminer les besoins de formation des DdS qui travaillent dans des ÉSLD en matière de prise en charge de la douleur.

MÉTHODOLOGIE : Les chercheurs ont adopté une méthodologie de recherche qualitative faisant appel à la technique du groupe nominal. Ils ont recruté 72 DdS (21 médecins ou pharmaciens, 15 ergothérapeutes ou physiothérapeutes, 24 infirmières et 21 préposés aux bénéficiaires) dans trois ÉSLD du Québec. Ils ont invité chaque participant à fournir une liste des sujets les plus importants à aborder dans un programme de formation continue sur la prise en charge de la douleur chronique dans les ÉSLD, classée par ordre de priorité.

RÉSULTATS : Quarante sujets ont été suggérés par l'ensemble des groupes, et six sujets précis étaient communs à au moins trois des quatre groupes de DdS. Tous les groupes accordaient la priorité aux besoins de formation sur l'évaluation de la douleur. Parmi les autres sujets ayant obtenu une note élevée, soulignons le traitement pharmacologique de la douleur, la neurophysiologie de la douleur, les traitements non pharmacologiques et la manière de distinguer l'expression de la douleur des autres comportements.

CONCLUSION : La présente étude a démontré que malgré une moyenne de plus de dix ans d'expérience dans les ÉSLD, les DdS ont des besoins de formation importants en matière de prise en charge de la douleur, particulièrement l'évaluation de la douleur. Ces résultats contribueront à la mise sur pied d'un programme de formation complet sur la prise en charge de la douleur à l'intention des DdS des ÉSLD.

(5). Older persons are also at a higher risk of neuropathic pain, including postherpetic neuralgia, for which advanced age is the main risk factor (11). Reduced pain modulation capacity and deficient descending inhibition have also been discerned in older persons (12). The frequent presence of comorbidities in older persons residing in LTCF increases the risk of suffering from chronic pain (13). However, such intrinsic factors play a relatively minor role; poor pain assessment and management may have a much more negative impact (14).

Several factors may contribute to inadequate pain management in older adults. First, it is well known that they tend to under-report pain, either due to false beliefs, misconceptions or misinterpretation of physical symptoms (15). Second, it has been determined that

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approximately 60% of older persons in pain do not ask for analgesics (16). Finally, pain among older persons is often neglected (ie, not periodically assessed) or even not assessed at all (17-19). Pain evaluation by health care providers (HCPs) is difficult and, hence, inadequate in patients with cognitive deficits (dementia) or communication problems, which are common in LTCF (20). Even though there are several validated scales for the assessment of pain in persons who cannot communicate, a lack of knowledge regarding proper pain measurement techniques prevents adequate evaluation and, subsequently, proper management of pain in this population (21).

Several studies have shown that pain is undertreated in LTCF (22), especially in patients with dementia, who receive less analgesic medications than those without dementia (18). In addition to being undertreated, pain is, unfortunately, sometimes managed inadequately. For example, studies have disclosed that older adults with dementia are prescribed more psychotropic medications than analgesic medications for their pain (23,24).

Other factors, mostly related to HCPs, can also explain poor pain management in LTCF. Many HCPs have false beliefs and misconceptions regarding pain (25-28), including that it is normal for people to have pain when they get older, that older adults perceive less pain than younger adults (15), that opioids lead to dependence (29), that older adults are complainers, fear of inducing respiratory depression or fear of giving the last (ie, lethal) dose of opioids (30,31). These false beliefs have a major impact on pain management, resulting in underuse or no use of analgesics in LTCF (22). There is also a general lack of knowledge regarding pharmacological treatments and fallacies about analgesics (29), which can evoke reluctance on the part of HCPs to provide proper pharmacological treatments (19).

Given that pain in patients living in LTCF is very common, underdiagnosed and often inadequately treated, there are several good reasons to implement strategies to improve pain management in LTCF (32). This is especially true for very old patients or those with dementia (33-35). In fact, improving pain management strategies in LTCF has become a key priority for many organizations, including the Canadian Council on Health Services Accreditation, which recently integrated a component on pain management into its norms to improve clinical practices. Major organizations such as the International Association for the Study of Pain (36) and the American Geriatrics Society (37) have also identified improvement in pain management as a key priority.

Part of the solution to improving pain management in LTCF would be to deploy interdisciplinary professional educational programs for HCPs (25,38,39). However, to be successful, such educational programs must be developed in close collaboration with HCPs (40). Although it is quite clear that HCPs need better pain assessment and management strategies, the specific content that would help improve their skills remains unknown. Obtaining this information is crucial, as educational programs solely aiming to improve pain assessment have not demonstrated convincing results so far (41).

Consequently, the present study is the first step in a vast knowledge transfer research program aimed at improving pain management in older individuals. In this context, its objective is to identify and prioritize the educational needs specifically perceived by each category of HCPs working in LTCF with regard to pain management.

METHODS

Setting and participants

A convenience sample of HCPs was recruited from three LTCF. These LTCF were chosen because they had an interest in being involved in the pain knowledge transfer research program. One of these facilities was university affiliated and had more than 700 beds. The two others were not university affiliated and were located in urban and suburban areas of the province of Quebec. HCPs, which included physicians, pharmacists, physical and occupational therapists and nurses, were conveniently enrolled via managers in each facility. Orderlies also participated in the present study because their duties involve patient

care-related activities in the province of Quebec. The project was approved by the Ethics Review Board of the Research Centre on Aging of the *Institut universitaire de gériatrie de Sherbrooke* (IUGS).

Design

A qualitative research design using a nominal group technique (NGT) (42,43) was chosen to meet the objective of the present study. The NGT is a process that facilitates effective group decision-making, generates a large number of ideas, minimizes researcher bias and ensures even participation from all group members (43). The purpose is to generate ideas about a question or an issue, which can then be prioritized. After proper introduction and explanations, stages of the NGT involve: silent generation of ideas; sharing ideas; clarification of ideas; and prioritizing ideas (43).

Procedures

After written informed consent was obtained from all participants, they were invited to fill out a short questionnaire for the collection of various demographic data and information about their work experience and level of education. Four nominal groups were formed within each LTCF, with six to eight participants each, grouped according to discipline (physicians and pharmacists, physical therapists and occupational therapists, nurses and orderlies). Each nominal group was structured according to the guidelines described by Potter et al (43). Participants were asked to silently generate ideas on the following question: "What do you think should be the content of a training session, developed for you, on the management of chronic pain in older adults residing in long-term care facilities?" After 15 min of individual work, subjects were asked to share their ideas. A research assistant recorded each idea proposed by participants on a flip chart via a round-robin process. This was repeated until the ideas of all participants were exhausted. After this first step, the facilitator (YTL), who had clinical experience in pain management, clarified the ideas and classified similar items into themes or categories – no ideas were eliminated. At the end of the process, categories were labelled according to the nature of the ideas generated by the participants. Finally, after the clarification and classification of ideas, each participant was asked to prioritize the items by ranking them on a scale from 1 (least important) to 7 (most important).

Data analysis

As proposed by Potter et al (43), to identify group priorities, data were analyzed according to a quantitative approach. This was performed using the ranks assigned to each item by the four different categories of HCPs. Themes that received no vote (score of zero) were eliminated. This approach was chosen to clearly identify the top priorities in pain education.

Each item was then scored according to the sum of votes received. This score was divided by the number of participants within the group to obtain a weighted score, which took into account the fact that the number of participants per group varied. The weighted scores of the different groups were then averaged. Finally, each mean weighted score was multiplied by the number of times it was generated in each study site (weighting factor). For example, if the item pain assessment was generated by each group in the three sites, it was assigned a weighting factor of three. In contrast, if it was only generated in two out of the three sites, it was given a weighting factor of two. An example of this calculation method is outlined in Table 1.

RESULTS

Participants

Among the three LTCF, a total of 72 individuals agreed to participate in the nominal groups: nine physicians, three pharmacists, 15 rehabilitation professionals (six physical therapists and nine occupational therapists), 24 nurses and 21 orderlies. The age of the participants ranged from 22 to 57 years (mean \pm SD age 41.4 \pm 8.8 years), and the majority were female (66/72), except in the physicians/pharmacists category. Participants had a median of 10 years of practice in LTCF (range six months to 32 years). When they were asked to estimate the

TABLE 1
Example of the method used to calculate scores for all topics

Item	Health care provider category: Nursing					
	Weighted score (total score/number of participants in NGT)			Mean of weighted scores (mean of three sites)	Weighting factor (number of sites where item was nominated)	Final score (mean × weighting factor)
	Site 1	Site 2	Site 3			
Pain assessment	5.62	4.37	5.02	5.02	3	15.07
Signs and symptoms of pain	4.62	–	4.85	4.74	2	9.48

NGT Nominal group technique

TABLE 2
Participants' characteristics

	n	Female sex, %	Age, years, mean ± SD	Years of practice in LTCF	Estimated hours of continuing education	
					Geriatric medicine	Pain management
All participants	72	92	41.4±8.89.3	10 (0.5–32)	22 (21–48)	0 (0–100)
Physicians and pharmacists	12	7	40.1±9.3	9.5 (0.5–30)	33 (10–135)	13.5 (0.5–30)
Rehabilitation professionals	15	100	38.2±9.0	5 (2–25)	35 (14–190)	0 (0–5)
Nurses	24	100	43.1±9.9	15 (0.25–30)	21 (7–50)	0 (0–30)
Orderlies	21	76	42.9±8.5	10 (0.25–32)	20 (0–150)	0 (0–2)

Data presented as median and range (minimum – maximum) unless otherwise indicated. LTCF Long-term care facilities

number of hours of continuing education (CE) they received in the past three years, the different groups reported a total ranging from 21 h to 190 h in geriatric medicine, with less than 10% of the total number of CE hours being devoted to pain management. Detailed information on each category of HCPs is summarized in Table 2.

Educational needs in chronic pain management in older patients

The sample of participants generated ideas which resulted in 40 different categories. Each category reflects the needs regarding pain management they believed were important to be addressed in an educational seminar. Of these 40 topics, six were common to at least three of the four groups of HCPs and included pain assessment, pharmacological treatment of pain, nonpharmacological modalities in pain management, pain neurophysiology, clinical signs of pain as opposed to other sensations/emotions and best communication strategies. Table 3 presents all identified needs prioritized for each category of HCPs. Although some topics are self-explanatory (ie, what are the biopsychosocial impacts of pain?), some of them encompass many ideas. More detailed information was reported on six common topics expressed by at least three of the four HCP groups.

Pain assessment

Regardless of the discipline, pain assessment was the top-rated topic among all educational needs and consequently obtained the highest weighting factor, which ranged from 13.2 to 18.9. All HCPs believed that they had very limited knowledge about this important component of pain management. They wanted to become familiar with pain assessment tools and learn how to use pain assessment tools designed for residents who are unable to communicate. Although they provide care for many patients with dementia on a daily basis, they admitted their lack of knowledge on the topic of pain assessment, in terms of both the instruments and the procedures to be used with this particular clientele. Furthermore, they wished to be better informed about the factors/components that characterize and differentiate acute versus chronic pain.

Pharmacological management of pain

The pharmacological management of pain was also very highly rated by all HCPs. The highest weighting factor (14.0) was in nurses and the lowest (2.3) in orderlies. However, the specific educational needs in this domain expressed by nurses, rehabilitation professionals and orderlies differed from those identified by physicians and pharmacists. The former group expressed that they required more education/information about the basic mechanisms of action of different types of analgesics (eg, opioids, nonopioids), their characteristics (eg, differences between codeine and morphine), and their respective properties

in terms of onset and duration of action. For example, participants wished to know how long a given medication should be administered before a therapeutic procedure (eg, a dressing change or physiotherapy session). In contrast, physicians and pharmacists had very specific needs and requested more information about drug interactions, management of adverse effects, best treatment strategies for neuropathic pain (eg, coanalgesics, topical analgesics), progression and substitution of pharmacological agents (ie, indications and principles of prescription).

Nonpharmacological modalities in pain management

While nonpharmacological approaches were, not surprisingly, rated highly by rehabilitation professionals, they were also prioritized by all other HCPs, as revealed by weighting factors ranging from 4.6 (physicians) to 10.0 (rehabilitation professionals). Participants complained about their lack of knowledge of ways to alleviate pain without medication, including use of transcutaneous nerve stimulation, positioning, relaxation, breathing techniques and exercises. All HCPs wanted to know the effectiveness of such nonpharmacological approaches in reducing acute and chronic pain.

Pain neurophysiology

Another common point of interest among all HCPs was pain neurophysiology, in which the weighting factor ranged from 3.9 to 13.3. Physicians/pharmacists, rehabilitation professionals and nurses manifested a strong interest towards greater comprehension of neurophysiological mechanisms of pain. For their part, orderlies believed they had poor knowledge regarding the processes involved in the development of chronic pain in older adults and its relationship with the different painful pathologies encountered among the aged.

Clinical signs of pain

Although this topic could easily have been included under 'pain assessment', HCPs systematically reported it as an independent item. Therefore, it was classified as a single category to better reflect HCP's expressed needs. All HCPs believed they did not know how to recognize the specific clinical signs and symptoms of pain, especially in patients unable to communicate or patients with dementia, and needed more information on how to recognize specific pain behaviours. For example, they wanted to know which facial expressions usually indicate the presence of pain and if patients with dementia show reduced or increased expressions of pain. They also wanted to know how to determine when nonspecific pain behaviours, such as crying or agitation, were related to pain or to another problem (eg, depression, loneliness). Finally, they wanted to know if vital signs were good indicators of the presence of pain. Physicians and pharmacists had the lowest weighting factor (1.5) while rehabilitation professionals had the highest (11.0).

TABLE 3
Educational needs and weighted scores identified and prioritized by health care providers working in three long-term care facilities

	Physicians and pharmacists	Rehabilitation professionals	Nurses	Orderlies
1	Pain assessment (13.2)	Pain assessment (18.9)	Pain assessment (15.1)	Pain assessment (15.9)
2	Pharmacological management of pain (8.4)	Clinical signs of pain (11.0)	Pharmacological management of pain (14.0)	Proper positioning and mobilizing techniques (13.0)
3	Accumulation of pharmacological agents: when to progress or substitute (5.3)	Nonpharmacological modalities in pain management (10.0)	Pain neurophysiology (13.3)	Nonpharmacological modalities in pain management (9.3)
4	Nonpharmacological modalities in pain management (4.6)	Pain neurophysiology (8.7)	Clinical signs of pain (9.5)	Painful pathologies in the elderly (7.6)
5	Pain neurophysiology (3.9)	Specific roles of HCPs in pain management strategies (4.6)	Pain management for palliative care patients (8.1)	When to stop active treatment and start comfort care (5.9)
6	Pharmacological treatments in relation to comorbidities (3.6)	Pharmacological management of pain (4.4)	Nonpharmacological modalities in pain management (7.1)	How to reassure the patient (4.9)
7	Managing side effects of pharmacotherapy (2.8)	When to stop active treatment and start comfort care (3.7)	Biopsychosocial impacts of pain (2.5)	Best communication strategies between HCPs (3.7)
8	Specific roles of HCPs in pain management strategies (2.6)	When to pay particular attention to clinical signs of pain (3.5)	Education of family members (1.9)	Do's and don'ts in regard to patients' medical history (3.3)
9	Clinical signs of pain (1.5)	Pain management algorithm (3.3)	How to mobilize patients without enhancing pain (1.0)	How to distinguish acute versus chronic pain (3.0)
10	Management of episodic pain (1.3)	Effectiveness of pain management strategies (3.1)	Long-term assessment of pain (0.6)	Psychosocial impacts of pain (2.4)
11	Establishing the best analgesic dose without inducing functional impairments (0.6)	Consequences and impact of chronic pain (2.7)	Painful pathologies in the elderly (0.3)	Pharmacological management of pain (2.3)
12	Invasive treatment modalities (0.57)	Best communication strategies between HCPs (2.2)	How to identify dependence on opioids (0.25)	Why patients in pain are often aggressive (2.0)
13	Intra-articular injections (0.6)	Active approaches to treat pain in the elderly (1.9)	Treatment of pain in demented patients (0.3)	Cancer-related pain (1.1)
14	Functional impacts of pain in LTCF residents (0.3)	How pain and dementia interact and affect mobility (1.5)	Systematic monitoring of pain in old persons (0.1)	Role of nutrition in pain (0.9)
15	Misbeliefs of HCPs and families regarding the use of opioids (0.1)	Pain management at the end of life (0.5) Cancer-related pain (0.4)		

Numbers in parentheses represent the final score obtained for each item based on calculations described in the data analysis section. Specific items that were identified among the majority of health care provider categories are coded in shades of grey for easier identification. HCP Health care providers; LTCF Long-term care facilities

Best communication strategies

The best communication strategies regarding pain were also a topic of interest expressed by all HCPs except nurses. They wanted to know the specific roles of each discipline, how to optimize teamwork and how to communicate pain-related information from one discipline to another (eg, from orderlies to nurses). The weighting factor of this topic ranged from 2.6 to 4.6.

DISCUSSION

The main goal of the present study was to identify and prioritize the educational needs of HCPs working in LTCF with regard to pain management for use in the development of a web-based educational intervention whose content meets the users' demands.

The results of the present study found that for all categories of HCP, the educational need for pain assessment (and especially in residents with communication impairments and/or dementia) was very highly ranked, suggesting that HCPs are poorly equipped in this area. These results are consistent with those obtained in previous quantitative studies, which ascertained that HCPs had poor pain assessment techniques, especially in residents with dementia (17,39,44). To our knowledge, the present study was the first to adopt a qualitative approach to highlight specific learning needs in pain management by HCPs working in LTCF.

Pharmacological and nonpharmacological modalities to relieve pain as well as pain neurophysiology were also topics that were highly rated

in terms of education needs. These results indicate that HCPs want to better understand the mechanisms causing pain in older persons and to have more options to better manage it. The specific needs identified for each HCP discipline are closely related to the nature of their role in pain management (26).

Another important topic among highly ranked needs dealt with communication issues within multidisciplinary teams. HCPs wanted to know the specific roles of each health care provider involved in patient care and the best strategies to effectively communicate pain-related information. This finding can be viewed as somewhat unforeseen. Even though our sample had several years of work experience in LTCF, they believed that they did not know how to effectively communicate pain-related information to other members of the multidisciplinary team.

Another interesting finding of the present study was related to the very limited number of hours of CE devoted to pain management. We observed that, despite the fact that HCPs working in LTCF are confronted by acute and chronic pain in their patients on a daily basis, they received very limited CE on this topic. In fact, except for physicians and pharmacists, all HCPs had less than 10% of their total CE hours dedicated to pain management. However, nurses and orderlies spend much more time with patients than physicians and pharmacists. These findings, which confirm the results of several other studies (13,21,45), support the need to develop comprehensive educational programs in pain management. Furthermore, these findings are not

only important for developing a CE curriculum, but also for pain curricula in undergraduate programs, such as medicine, pharmacy, rehabilitation and nursing.

The highly ranked items discussed above will define the major part of our educational program. With these top rated educational needs, we will build web-based learning seminars that will include modules on pain assessment, pain neurophysiology, nonpharmacological therapeutic options and pharmacological approaches for physicians and non-physicians. The items within the top 10 not addressed within the web-based learning seminars will be addressed by group discussions that will be conducted on each ward during an in-person training session.

Although educational programs to improve pain management already exist (eg, www.geriaticpain.org, www.nhqualitycampaign.org), our web-based learning seminars will offer the advantage of being customized to the expressed needs of HCP working in LTCF, and will also integrate an interactive portion in which individual participants will have the chance to receive more detailed information relevant to their facility.

There are several strengths to the present study. As mentioned earlier, it is the first to use a qualitative design (NGT) to document the specific learning needs of HCPs working in LTCF. The NGT is a scientifically recognized method of assessing and facilitating the generation and prioritization of ideas in a clinical setting (43) and is known to have high internal validity (46). By recruiting HCPs directly involved in daily patient care in LTCF, we ensured that the expressed educational needs reflected challenges met in clinical practice. Finally, the fact that we had three groups of participants for each discipline enabled us to identify all important educational needs, as shown by a rapid achievement of a saturation of ideas, without any new ideas (needs) emerging after the second group of participants. This considerably increases the generalization of our findings.

There are also several limitations to the present study. The HCPs who chose to participate in the NGT were interested in the study topic, which created a certain selection bias. This was also true for LTCF selection, as they were selected on the basis of their interest in testing the educational program to be developed from the present research. However, interest in the topic is not necessarily a negative thing in the context of changing clinical practices, a process that is known to be extremely difficult (47). Based on adult learning principles, the development of a learning curriculum must involve the participation of actual players and be designed in accordance with the learner's needs and interests (48). Once the program has been created and proves to have a positive impact, it can be proposed to other HCPs who are more or less interested in the topic but who can now realize its utility and relevance. Another limitation comes from the fact that we only assessed the perceived needs of a convenience sample of HCPs working in LTCF rather than the actual knowledge deficits of the entire group; our educational program might be incomplete because there may be some theoretical needs that HCPs are not aware of. However, we will include the participation of content experts during the in-person training, and these experts will ensure that the actual theoretical needs will be addressed in addition to the perceived needs.

The results of the present study have some important clinical and educational implications. No other study previously established the needs of HCPs in LTCF with regard to pain education in the context of health care services in Quebec and Canada. The results obtained through the NGT will help define, prioritize and structure the basis of an educational program tailored to HCPs' perceived needs, and its main objective is to enhance pain management and alleviate the burden of pain in LTCF. The findings of the present study will be presented to a panel of Canadian pain experts (researchers and clinicians) to optimize the development and design of the web-based intervention and to identify the most appropriate methodologies to assess its efficacy and impact.

Improvement of pain management strategies in LTCF

Strategies implanted to improve pain assessment alone do not always culminate in better clinical outcomes such as reduced pain

prevalence (41). The campaign 'Pain as the fifth vital sign', a strategy implanted to improve pain management, is a good example (49). Although educational interventions can certainly help, better health care policies established by decision makers are probably needed to achieve positive changes in clinical practices. As outlined by many authors (38,50), policies that incorporate a quality improvement approach are needed, because they will provide the foundation for sustained success and help in transforming current pain management strategies in LTCF. Studies by Leone et al (51) and Keeney et al (47) have adopted such an approach, with promising results.

CONCLUSION

The present study is the first step in a vast knowledge transfer research program aimed at improving pain management in older persons (www.programmeaccord.org). The results uncovered common needs among all groups of HCPs, including pain assessment (which was ranked as the most relevant topic by all groups of HCPs), clinical signs of pain, pharmacological and nonpharmacological pain treatments, pain neurophysiology as well as communication strategies between each group of HCPs. These themes will define the major part of our educational program, because these necessarily reflect the perceived needs of HCPs working in LTCF. We hope that by addressing these specific needs we will optimize pain management, including improving pain assessment and treatment in LTCF and hopefully reducing the burden of pain in elderly persons residing in such institutions.

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