

Interventions for Assessment and Enhancement of Pain Management Competencies among Healthcare Professionals

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Abstract

To pain management competencies among healthcare professionals is crucial for improving patient care and outcomes. Healthcare professionals must possess the necessary knowledge, skills, and techniques to effectively manage and treat pain in their patients. This includes understanding different types of pain, assessing pain levels, and utilizing appropriate interventions. By accurately assessing pain levels and implementing a multimodal approach to pain management, healthcare professionals can optimize patient outcomes and minimize risks. Effective communication skills and staying updated on the latest evidence-based practices are also essential. Continuous education and professional development are vital for healthcare professionals to enhance their pain management competencies and deliver the best possible care. Include training healthcare professionals in pain assessment techniques, educating them on the multidimensional nature of pain, providing resources and tools for accurate and comprehensive pain evaluation, encouraging interdisciplinary collaboration to enhance pain management strategies, fostering a patient-centered approach that values the individual's self-reporting of pain, promoting ongoing education and professional development to ensure up-to-date knowledge and skills, conducting regular assessments and evaluations to monitor the effectiveness of pain assessment training programs, and supporting a culture of continuous improvement and innovation in pain assessment practices. Additionally, technology-based solutions such as electronic pain diaries and telemedicine can be utilized to enhance pain assessment and monitoring capabilities. Include successful implementation and execution of transformative educational programs, catering to diverse learner needs. These initiatives foster holistic learning, instilling a love for knowledge in students. Outcomes show remarkable progress, enhanced critical thinking, creativity, and problem-solving abilities. Innovative teaching and cutting-edge technologies empower countless individuals, unlocking their potential and achieving academic excellence. Collaborative approach establishes a foundation for lifelong learning and personal development. Equipped with acquired knowledge and skills, individuals make a lasting impact in their fields, shaping a brighter future for themselves and society. Pain management is an incredibly crucial aspect of healthcare, and it is absolutely essential for healthcare professionals to possess the necessary competencies to accurately assess and greatly enhance their ability to provide highly effective pain management interventions. Ensuring that patients receive optimal pain relief and care should be a top priority for all healthcare providers, as it positively contributes to their overall wellbeing and enhances the quality of their medical treatment. Therefore, healthcare professionals must continuously invest time and effort in expanding their knowledge and skills related to pain management to ensure they can deliver the highest level of care to their patients. By doing so, we can strive towards a healthcare system that prioritizes pain management and empowers healthcare professionals to make a significant difference in their patients' lives.

Keywords: Pain Management Competencies, Healthcare Professionals and patient care.

INTRODUCTION

Introduction to Pain Management Competencies in Healthcare Professionals

A range of educational strategies have been tested in pain management, with sometimes conflicting results. Education is needed, but it also needs to be effective. There are many reasons why pain education of our healthcare workforce needs to be based on sound pedagogical principles and evidence-based research evidence. First and foremost, because pain is a personal and subjective experience, the patient as a key actor in the delimitation of pain needs to have a good relationship with the healthcare professional. Second, it is known that a good relationship between patients and healthcare professionals inevitably influences pain severity, pain interference, healthcare professionals' empathy and concern, the quality of the interaction and the quality of life of the patient. In addition, job satisfaction of primary care professionals, as well as continuity of care, are both

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relevant factors impacting health outcomes such as pain, in a primary care management model. Understanding empathy and patients' preference for greater empathic communication and leadership skills in their doctors is mandatory for a successful outcome, good interpersonal consultations, and likely enduring relationships. Documentation of empathy levels in consultation subsequently has a positive impact on consultation satisfaction, a relevant aspect of the quality of primary care, being the major determinant of the processes of care, emerging from patients' values, evidence for diagnostic and therapeutic options, and the preferences of the patient. Higher primary care satisfaction has been associated with trust, rapport and effective communication while lower satisfaction has been linked to communication breakdowns such as a lack of empathy, disrespect, inattentiveness and failure of practitioners to explain purposefully.

As pain is undisputedly the most frequent symptom that motivates patients to seek healthcare, it is also vital for healthcare professionals to deal effectively with it, irrespective of their disciplines and the healthcare settings they practice in. Despite increasing awareness and knowledge, the issue of pain assessment and management remains complex. There are quite a few barriers that explain why pain is not managed effectively, or to its full capacity, within the healthcare dilemmas and the multiple dimensions of quality. An analysis of pain education for undergraduate and postgraduate healthcare students published in 2010 revealed that pain education in the major healthcare disciplines might not be optimal, and it could be strongly influenced by an array of factors including the type of pain, the cause, the patient, and a diverse range of personal, social and institutional factors, among many others.

Importance of Assessing and Enhancing Pain Management Competencies

Quality of healthcare is mostly reflected by the competence of healthcare professionals. This unavoidable demand for competencies in pain management by patients and the society can be met by providing adequate training to the future healthcare professionals and providing appropriate continuing education to the existing healthcare professionals. It is indeed impossible to properly train all the healthcare professionals who treat pain. Therefore, the professionals who are not adequately trained can be supported in three ways. First, practice guidelines can be developed and implemented for management of particular types of pain to ensure quality of pain care. Second, most patients with pain are not difficult to manage. Patient education materials can empower patients to take a more active role in their own treatment. Third, educational materials, such as online learning, can allow healthcare professionals access to just-in-time training for the management of specific types of pain. (Marun et al.2020)

Pain is the chief reason why an individual seeks healthcare. Patients refuse to visit healthcare facilities if pain is not adequately treated. Opiophobia in countries has been primarily due to lack of knowledge about addiction and control measures. But there have been several published studies that show the effectiveness of opioids in relieving pain and the contribution to quality of life and work performance. Fear of addiction by healthcare professionals is unjustified in patients taking a stable dose of opioid for persistent pain.

Barriers to Effective Pain Management Competencies in Healthcare Professionals

Objectives and Methodology: The fundamental objective of this systematic review is to evaluate existing interventions to improve the pain management competencies of healthcare professionals. With this idea, we will answer the following questions: What type of interventions evaluate current awareness regarding pain assessment and diagnosis among healthcare professionals? What is the degree of awareness of current pain management competencies among healthcare professionals? What is the degree of awareness regarding the prevention and management of medication-related side effects among healthcare professionals? What pain management competencies can be improved in healthcare professionals? What is the effectiveness of educational strategies for pain management in healthcare professionals? And what side effects can be treated and managed appropriately. A systematic review has been carried out in two electronic databases: Web of Science and PubMed. Human studies in English, Portuguese, Spanish, Italian, French, German, and Dutch were included. (Cousins et al.2022)

Despite the fact that pain is often identified as one of the most important problems faced by patients, in general, healthcare professionals have minimized its importance and have given it low priority. Pain management is a

complex phenomenon, yet the majority of efforts designed to ensure pain relief have focused on pharmacologic interventions. Among pharmacists and other healthcare providers, the importance of addressing pain and pain care practices in the training and practice setting is not consistent. Because of the need to address this important problem, it is necessary to know more about what limits healthcare professionals from assuming a greater role in the assessment and management of pain. Despite ample educational efforts, healthcare providers are not adequately prepared to have the competencies they need to appropriately provide pain management, and inadequate training in many different cultures has been perceived as the main alcohol of this deficit. Inadequate knowledge and fear of addiction and tolerance are the main barriers to inadequate pain management.

Assessment Methods for Pain Management Competencies

Several teaching strategies can be used in order to improve knowledge levels and attitudes about opioid pain medications and management. As a result, it is possible to elevate efficacious management of pain. In our setting, we held an annual training program between 2010 and 2015. Using the I-Harmonized code, 16 hours of training, two three-monthly clinics, and two-hour training sessions to address the professional team. We harnessed an interactive approach including multimedia (computer-based education and slide presentations) in addition to hands-on presentation care plan data management. To the extent that company policy and workforce required a change in the formats, manual, and default presentation every 4 months, we could change the content of each session and related exercises if necessary. (Fühner et al., 2021)

Nurses who are knowledgeable about all aspects of pain and the pain management process can optimize the intended benefits of morphine. It is essential to assess the level of knowledge that nurses have about this important subject. Over the years, we have surveyed such knowledge in a general hospital located in the southeast of Spain based on the questionnaire developed by Manchikanti et al. We found low levels of knowledge about key issues in the management of opioid drugs among nursing professionals in a position of responsibility. The low scores obtained in our hospital result in similar data of knowledge evaluation that have been obtained in nursing studies in North America and Europe in the context of hospital consumption of said medication. Lurie et al. employed a pain management quiz in a hospital setting in the United States and found average grades lower than 60%. Logan et al. obtained similar data in Australia, while Crawford et al. found slightly higher (70%) grades of competency in advance practice nurses and graduated physicians. (Maestro-Gonzalez et al.2021)

Educational Interventions for Pain Management Competencies Enhancement

Introductory essay on pain management competencies published by Fang et al., presented by the International Expert Pain Curriculum joint committee of the IASP. The joint committee encouraged learning as being crucial in promoting pain education programs validation and accreditation, hoping that graduates fulfill basic competencies on pain management concerning their professional roles. The programs deliver to participants with the essential knowledge, attitudes, and skills to respond to various pain conditions, therefore, it is important to ensure that any discussion undertaken in the class is with the sound support of cognition, to whom it is purported to attend. (Manchikanti et al., 2020)

Educational interventions are strategies that aim for pain learning to respond to educational needs. There are various ways of getting it, but the lecture and workshop methods prevail. The aim is to identify the methods and characteristics of educational interventions used to develop and assess the competencies of health care faculty and professionals in pain and palliative care. Data collection and analysis were based on a systematic scoping review. We undertook a systematic scoping review, aligning with the 'Preferred Reporting Items for Systematic Reviews and Meta-Analysis' guidelines, involving a comprehensive search strategy. Internet sources included the CINAHL Plus, Cochrane Library, PsycINFO, and Medline using the MeSH Process, from the inception until May 2020 with no language restrictions. Conference abstracts and the name of experts in the field, plus centers and repositories known for their relevant publications. The final search included all types of documents and sources published in relation to the educational intervention research topic. Data revealing characteristics of the educational interventions reported were extracted using a pre-existing data charting form framework that would fit the domain of interest, study types, participants, description of methods of interventions, and outcomes.

The last part of our review was related to educational and clinical training interventions in pain and palliative care, for being able to learn about educational interventions for pain management competencies. We should focus not only on theoretical learning to reach knowledge improvement, which leads to correct attitudes, but also to achieve behavioral change among professionals, practicing following their learning. We should not forget that attitudes are receiving a lot of attention and increasing importance, describing its significance and demanding correct attitudes leads to a behavior change in daily clinical practice, reporting and identifying adequate measurements for behavior change.

Clinical Training and Simulation for Pain Management Competencies

Pain is a complex phenomenon and pain management requires competence in all aspects of pain assessment. However, many barriers exist against the acquisition and demonstration of competence in pain management and care. Previous studies examining the curriculum allocated to pain in physician training programs have reported major gaps between the content and the hours of education that are available and the scientific knowledge that is required in order to ensure knowledge of the mechanisms, consequences and principles of patient care in the pain field among medical trainees. Comprehensive pain education programs, therefore, need to be developed and implemented in order to ensure that trainees have the required competencies. The Clinical Training and Simulation for Pain Management Competencies project was developed within the European Pain Federation: Northern Societies in accordance with the European Parliament resolution that calls for teaching on evidence in all medical schools as well as up-to-date continuation courses for all medical practitioners and the World Health Organization providing guidelines for improving the quality of education provided for all healthcare workers. (Johansen et al.2022)

Pain management requires competence in all aspects of pain assessment and treatment. However, a number of factors may influence the ability of healthcare professionals to acquire these competencies. Educational interventions that enable healthcare professionals to gain the knowledge and skill in pain management should help to improve the evidence-based analgesic therapy for optimal pain control. This paper provides a brief review of the pain management competencies with interventions that have been designed and evaluated to address the lack of competence in this field. Recommendations for future development of educational interventions for assessment and enhancement of pain management competencies will also be discussed to ensure implementation of the best evidence-based therapy at the bedside.

Use of Technology in Pain Management Competencies Assessment and Enhancement

Technology tools such as smartphone applications, podcasts, multimedia, and advanced simulators are cost-effective choices to enhance traditional educational methods in health sciences. Mobile technology, assuming that healthcare students are rarely in front of a computer, is in favor of training accessible on portable electronic devices and in health team studies and intervention-focused therapy, increasing motivation to learn. It is vital that technology is ready and easy to use and is a required element. However, it is meaningless when used in off-context education settings. Just-in-time text messages, apps, and assessment tools have been beneficial depending on the readiness model. Educational applications using the electronic support of knowledge construction in health sciences have been effective in communication, data collection, and access to the needed content. E-book reading has improved engagement and critical thinking, but it has been recognized that the effective use of technology in health sciences depends on technological literacy, multimedia production, and media education in the health teacher training plan. (Moro et al.2021) (Chandran et al.2022)

On the contrary, faculty who teach have lived their entire lives free of technology, and the value they see is limited to PowerPoint presentations and demonstrations, and therefore does not motivate students to use new technology. Faculty face questions from students on why simulation, gamification, and all modern educational methods are used. Unfortunately, the outcome is disillusionment with the new tools and the clinical content. However, it is necessary to develop a synergy between educators and instructional designers to achieve the professional competencies necessary in today's digital world. (Beardsley et al.2021)

Challenges in competencies are dependent on the general educational level, and especially technology use as an adjunct to education can increase the readiness to integrate the previously acquired knowledge into clinical

practice. However, there is a paradox in terms of technology use. Most of the students and the younger professionals have a great affinity for technology and are impatient with traditional educational methods because they have used computers and cell phones as common tools for a long time but are unfamiliar with how technology supports learning, especially in terms of decision-making.

Interprofessional Collaboration in Pain Management Competencies Development

The use of IPE workshops may address existing gaps in interprofessional collaboration and may have an immediate impact on undergraduate students' attitudes, skills, and knowledge in pain management practices. Interprofessional education was well received by the participating students, who felt that it helped them develop teamwork important for delivering complex patient care. The implementation of an almost authentic experience of IPC has emerged as a model application, targeting long-term residents' postgraduate common formative years, during which an ensemble approach of all professionals is crucial and expected. Data suggest collaboration facilitated improved communication and implementation of best practices related to pain management. Institutional and individual factors include key mediating factors rooted within the basic pedagogic philosophy, curriculum flexibility, mentor network support, and whether participants feel they can or want to relate and learn from one another. (Garwood et al.2022)

The use of interprofessional education to enhance undergraduate learning may have a lasting effect on professionals' perceptual competencies and their capability for effective interprofessional collaboration in the care of patients with cancer pain. Incorporating team-based learning and collaborative skills developed through the expanded role of clinical pharmacists in acute pain management can augment health professional trainees' education. Undergraduate health-focused curriculum designers need to prioritize interprofessional education that would increase collaborative practice among medical and nursing students in the area of pain assessment and management for patients with terminal illness and to address this gap by developing and measuring palliative care competency-based interprofessional education. (Garwood et al.2022)

Cultural Competence in Pain Management Competencies

Engagement and further education of experienced healthcare professionals may contribute positively. A small-scale study showed that an educational intervention designed for experienced healthcare providers had a moderate effect, while improving clinical practice guidelines, fostering culture-based clinical education, and increasing valid clinical pathways. Finally, due to the majority of the pain and related discomfort that pain management interventions do not focus on, other multiple effective interventions that do not satisfy the encapsulated pain indicators and related discomfort indicators must remain an important supportive measure, and research evidence level, for research participants and clinical patients. (Kalra et al.2021)(Jaam et al., 2021)

Currently, facilitators of pain management are often scarce, relatively expensive, and not widely available. For example, educational workshops facilitated by expert healthcare providers or professionals usually have the resource advantage of high cost and limitedly attracting workshop participants to attend widespread locations. Films used in educational interventions were developed and filmed in Canada. Opioid misuse, dependency, and abuse varies by ethnicity. Care-provider or patient participants who are given the opportunity to choose a facilitation based on their native language have advantages in content retention rates due to different conceptual approaches to their native language.

The Institute of Medicine has recommended cultural competence in pain care for healthcare professionals. In this context, a study focused on the development and evaluation of an educational intervention on the comprehensiveness of how geriatric medicine fellows communicate about pain with Hispanic patients with dementia was carried out and achieved a 115% improvement. It has been suggested that a health professional who is experiencing limited language proficiency or working with a professional interpreter may not be able to fully understand and adapt to the culture, beliefs, and values of the patient seen in the clinical setting. Therefore, educational interventions aimed at enhancing pain management competencies for healthcare providers or professionals must include and/or focus on cultural competence, especially for care providers who are immigrants or temporary workers who were tested for limited English proficiency. (Ghoshal et al.2020)

Ethical Considerations in Pain Management Competencies Enhancement

Competence in pain management is considered a core skill for healthcare professionals. Both under- and overtreatment of pain remains a significant problem for patients across all age groups, care settings, and locations around the globe. Due to these intolerable situations, a greater emphasis has holistically been put on the assessment and enhancement of pain management competencies among healthcare professionals. Consequently, international activities have been recommended to ensure that these professionals have the required knowledge and competencies. In this regard, a committee of experts has developed internationally proposed standards for pain management education and training. The standards focus on the fundamental concept of preparing each country's student providers, residents, and basic to advanced-level practitioners to provide safe, high-quality, evidence-based pain care, regardless of their work/title, patient population(s) treated, or specific profession. (Alkhatib et al., 2020)

Competence in pain management is important for healthcare professionals. Consequently, international activities have been recommended to ensure that healthcare professionals have the required knowledge and competencies in pain management. To aid in the development or assessment of pain management competencies, this paper presents an inventory of all pain management competencies containing a teaching, training, or assessment component. Due to the composition of the inventory, it is primarily useful for the teachers in this field and healthcare quality assessors and may act as a tool for the development of efforts aimed at the assessment or enhancement of pain management competencies among healthcare professionals. The inventory may also provide guidance to students in the selection and evaluation of pain management programs, skills labs, or internships. (Cousins et al.2022)

Future Directions in Pain Management Competencies Assessment and Enhancement

The innovative team-based learning program entails medical, dental, nursing, and pharmacy experiential joint education that performed better than traditional learning approaches to interdisciplinary education and was well-received by students. The team-based learning program addressed several pain management competencies both independently and in a team format among medical, dental, nursing, and pharmacy students, residents, and practitioners. It would be logical to continue to use the TBL method for pain management education courses and to examine the value of using the TBL approach for teaching pain management courses. Many other dental, medical, nursing, and pharmacy courses use TBL or similar patient care-related innovation learning approaches. Moreover, TBL would encourage faculty to approach pain management education in a student-centered way, encouraging student-led processing of the discipline. It is also crucial for medical, dental, nursing, and pharmacy faculty and students to recognize barriers, such as missing leadership in senior settings and having to improve access to a pain management instructor at the School of Dentistry and Nursing. (Thompson, 2022)

The published research review findings suggest that assessing pain management competency helps in tailoring the continuing education needs for individual healthcare professional groups. Researchers have developed multiple modes of teaching strategies which include basic pain management competencies, advanced pain management competencies, and inter-professional pain management competencies. The educational studies continue to suggest that having pain management in the curriculum results in a significant improvement in pain assessment and knowledge of pain management among different healthcare professional students. However, concealing patient's pain remains a concern, which requires instituting evidence-based best practices guidelines in pain management. Researchers and administrators need to assess the motives for nursing students, medical students, dental students, and pharmacy students thinking prescription opioids for severe pain can lead to patient addiction and resource abuse. Strategies are needed to enhance pain management competency and positive attitudes toward pain management and increase access of pain management competency and pain management learning objectives among healthcare professional students and practicing healthcare professionals.

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