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The Current State of Physical Therapy Pain Curricula in the United States: A Faculty Survey

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Abstract: **Insufficient pain education is problematic across the health care spectrum. Recent educational advancements have been made to combat the deficits in pain education to ensure that health care professionals are proficient in assessing and managing pain. The purpose of this survey was to determine the extent of pain education in current Doctorate of Physical Therapy schools in the United States, including how pain is incorporated into the curriculum, the amount of time spent teaching about pain, and the resources used to teach about pain. The survey consisted of 10 questions in the following subject areas: basic science mechanisms and concepts about pain, pain assessment, pain management, and adequacy of pain curriculum. The overall response was 77% (167/216) for the first series of responses of the survey (Question 1), whereas 62% completed the entire survey (Questions 2–10). The average contact hours teaching about pain was 31 ± 1.8 (mean ± standard error of the mean) with a range of 5 to 115 hours. The majority of schools that responded covered the science of pain, assessment, and management. Less than 50% of respondents were aware of the Institute of Medicine report on pain or the International Association for the Study of Pain guidelines for physical therapy pain education. Only 61% of respondents believed that their students received adequate education in pain management. Thus, this survey demonstrated how pain education is incorporated into physical therapy schools and highlighted areas for improvement such as awareness of recent educational advancements.**

Perspective: ***This article demonstrates how pain education is incorporated into physical therapy curricula within accredited programs. Understanding the current structure of pain education in health professional curriculum can serve as a basis to determine if recent publications of guidelines and competencies impact education.***

Key words: *Pain, physical therapy, education.*

More than 100 million adults in America suffer from chronic pain, costing over $600 billion per year in health care expenditures and lost wages.[13,17] An inadequate understanding and management of pain is rapidly becoming a public health problem. Mismanagement of acute pain can delay healing, resulting in long-lasting changes to the peripheral and central nervous systems and consequently chronic pain.[6] Likewise, insufficient knowledge of chronic pain mechanisms and management can further create major human and economic costs for patients, families, and society.[12] In 2010, the International Pain Summit, an advocacy event of the International Association for the Study of Pain (IASP), endorsed the Declaration of Montreal, which stated that all people have the right to pain management by competently trained health care professionals.[8] Several factors were outlined regarding the current inadequacies of pain management, including deficits in knowledge by pain practitioners.

In 2011, the Institute of Medicine (IOM), which is an independent nonprofit organization that provides advice on national issues relating to health and medicine,

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complemented the Declaration of Montreal by highlighting the need for a cultural transformation in relieving pain in America.[17] The IOM report was developed in collaboration with the United States Department of Health and Human Services through the National Institutes of Health to investigate pain as a public health problem. Specific entities identified to partake in this transformation were health care providers and health care professional associations. Similar to the Declaration of Montreal, education challenges were discussed in part to address insufficient pain knowledge for both undergraduate and graduate training programs. These educational challenges extend to physical therapists, as the IOM reported that physical therapists have a history of not being adequately prepared to provide pain management.[17(p.207)] The report noted the nominal hours spent on pain education but did not specify specific content areas that were lacking.

The insufficiencies in pain education are problematic across the health care spectrum and include the following: medicine, dentistry, occupational therapy, nursing, pharmacy, and physical therapy (PT).[9,16,17,22,29,33,35] In a 1991 survey of orthopedic physical therapists, 72% reported that their entry-level pain education was very inadequate or less than adequate; this may explain why 96% preferred not to work with patients with chronic pain.[36] A survey for pre-licensure pain curricula in Canada reported that students of physical therapy receive 2.5 times more pain content than students of medicine (42 and 16 hours, respectively) but less than half that of students of veterinary medicine (87 hours).[35] In a 2001 faculty survey on pain education in accredited PT programs in North America, the modal amount of time was 4 hours.[28] Despite the nominal contact hours, most of the topics surveyed were reported as adequately taught except for pain across the life span (especially children and elderly) and cognitive behavioral approaches.[28]

Recent educational advancements have been made to combat the deficits in pain education to help ensure that health care professionals are proficient in assessing and managing pain. IASP developed a task force that consisted of a group of physical therapists worldwide with expertise in pain.[18] This task force established recommendations on pain curricula specifically for physical therapists. This curriculum was based on the 3 principles identified from the Declaration of Montreal: 1) access to pain management without discrimination; 2) acknowledgement of their pain and being informed about how it can be assessed and managed; and 3) appropriate assessment and treatment of the pain by adequately trained health care professionals.[8] The task force recommended that pain curricula be taught as an independent course for students with a background in anatomy, physiology, and kinesiology. The 4 main components of the curriculum included the following: 1) multidimensional nature of pain; 2) pain assessment and measurement; 3) management of pain; and 4) clinical conditions.

Another recent educational advancement is the establishment of core pain management competencies. In 2013, an interprofessional committee developed core competencies in pain assessment and management for pre-licensure health professional education and included the following 4 categories: multidimensional nature of pain, pain assessment and measurement, management of pain, and context of pain management.[12] The competencies were established as a guide for health care educators to advance pain education and were intended to be flexible in order to meet the expertise of each profession, and we recently addressed how these competencies relate to PT education.[15]

Based on the advancements in pain education, greater awareness of pain as a health care problem, and the integral role that PT plays in pain management, we developed a survey to assess the extent of pain education in current accredited PT schools in the United States. Additionally, the survey was designed to evaluate how pain was incorporated into the curriculum, the amount of time spent on pain, and the resources used to teach about pain.

Methods

Subjects

All accredited PT schools in the United States were the target population. The list of PT programs (n = 216) was obtained in October 2012 from the website of the Physical Therapist Centralized Application Service, which is a service of the American Physical Therapy Association (APTA) for students to use a single application that lists both participating and nonparticipating schools. Information regarding the questionnaire along with an electronic link to the questionnaire was sent to the program directors and/or faculty members at each program. Initially, the director was sent the e-mail with the survey link and instructions to complete the survey him/herself or to forward the e-mail to the most appropriate person. This message was sent to the director on 2 occasions. We asked that survey respondents include the name of their school so there could only be 1 response per school. If a director did not respond, the authors then reviewed the website of that PT program to identify the most suitable faculty member that listed pain as part of his/her content area to complete the questionnaire. Individualized e-mails were then sent to the faculty member with the survey link. Programs that did not respond were sent a minimum of 5 e-mail messages from October 2012 through January 2013. This study was exempt from institutional review board approval because the educational curriculum survey involved gathering information on normal educational practices (pain education) in an established educational setting (U.S. accredited PT programs). No identifiable data on any individual was collected in this survey—only the name of the school and the rank of the person filling out the survey were collected.

Survey Instrument

The main aim of the questionnaire was to determine the extent of pain education in PT schools. The authors have extensive experience in pain education in PT curricula, were part of the IASP task force on developing