Learning from Our Learners: Implications for Pain Management Education in Medical Schools

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The high prevalence of pain seen by clinicians in ambulatory settings [1,2] combined with the insufficient number of pain specialists in the community necessitates that most patients with pain are managed in primary care. However, most primary care physicians (PCPs) have had little formal education or training in pain management [3]. The limited pain instruction that PCPs receive is usually fragmented and learned “on the job” rather than as part of a comprehensive course that spans their medical school (undergraduate) and residency (graduate) years. As a result, PCPs may lack the requisite knowledge and skills to effectively diagnose and treat patients with pain. Furthermore, work by our group [4] and Dobscha et al. [5] show that PCPs view treating chronic pain as “frustrating” and “difficult” largely because of their perceived inability to offer optimal treatments for chronic pain.

There is a significant gap in medical school education related to pain management. According to a 2001 Association of American Medical Colleges survey, only 3% of medical schools required a course on pain management [6]. In the last decade, health care systems (Veterans Health Affairs) and professional societies such as the American Academy of Pain Medicine [6] and the International Association for the Study of Pain [7] have developed comprehensive curricula to help fill this educational gap. Furthermore, academic centers alone and in collaboration with pharmaceutical partners have created innovative pain curricula targeting students and trainees. A few notable examples include those developed at Virginia Commonwealth University [6], Johns Hopkins University [9,10], and Beth Israel Medical Center [11]. Despite these efforts, pain management education is still struggling to establish a foothold in an already crowded medical school curriculum [12].

In this issue, Corrigan et al. [13] describe an interesting study of first-year medical students’ perceptions of their interactions with patients with pain in primary care. Student participants from the University of Washington were asked to document any interesting or concerning clinical experiences in “reflective journals” during a 1-month community medicine rotation. Students were not cued to write about pain encounters. The research team analyzed qualitative data entered in the journals and reached consensus on three emergent themes (negative, positive, and neutral) that characterized students’ perceptions of pain. Of the 94 students that participated, more than half (51%) wrote journal entries related to pain representing 89 separate clinical interactions. Notably, 75% of the pain-related interactions were perceived by students as negative.

Students expressed exasperation (“Listening to patients talk about their pain and suffering is exhausting”), were skeptical of some patients’ requests for opioids (“I hear about the drug seekers from those with ‘true’ chronic pain”), and had difficulty with “boundaries” and reconciling discrepancies between subjective reports of pain and findings (or lack thereof) from diagnostic studies. A strikingly low number (11%) of the interactions were perceived as positive by students. One student realized “... that is OK to listen to the patient when they say they are hurting” and learned that it is important to validate a patient’s report of pain. Corrigan et al. [13] reached two conclusions. First, medical student participants identified pain as a “major concern” in their early clinical experiences. Second, a large majority of interactions with patients with pain, especially those with chronic pain, were viewed as negative.

From my perspective as a pain educator, the study’s findings are concerning and raise several questions for future research and educational efforts. What role, if any, do faculty preceptors have in influencing medical students’ perceptions of patients with pain? What are the root causes that explain medical students’ negative perceptions? Can these negative perceptions be changed? How can we capitalize on the aspects of pain care perceived as most positive while at the same time address the aspects perceived as negative? What are the implications for pain management curricula developed in the future? How can pain and medical educators most effectively teach the next generation of students and trainees?

High-quality, clinician training programs (pain management rotations and electives), interactive continuing medical education activities (symposiums, workshops, and lecture series), “pain mentorship” programs, and ready access to expert consultation are necessary to fill the pain education gap but not likely sufficient. The traditional conceptualization of medical education with its emphasis on the practice of disease and biomedical approach to diagnosis and treatment is not optimally suited for pain conditions. Treatment goals traditionally emphasize the restoration of health or cure many times at the expense of understanding the patient’s psychological and social experience of
pain. With this misconceived emphasis, patients become frustrated when a cure is not achieved and clinicians feel like they are “failing” their patients [4].

Chronic pain, in particular, needs to be viewed as a chronic illness that does not have a cure as an end state. Rather, the goals of pain care may be less precise (e.g. “feel better”) and include quality of life and coping with disabling pain. Pain management education should continue to emphasize the interplay among biological, psychological, and social factors that influence individuals’ pain experiences. However, a critical piece missing from many of the available pain management curricula is instruction in effective communication and relationship skills [14]. These skills can enhance the patient-centeredness of clinical interactions, build mutual trust and respect, and foster shared clinical decisions between patient and provider. Essential elements of shared decision making are humanism and empathy for the experience of individuals with chronic pain. Two studies in this area warrant mention. Sullivan et al. [15] tested a shared decision-making intervention among PCPs and showed that learning these skills helped physicians feel more competent in issues related to opioid management. Another study [16] found that providers described their communication with patients with fibromyalgia as more productive and less difficult after learning shared decision-making strategies.

As teachers and pain educators, there are several simple ways we can help foster more positive perceptions of patients with pain and attitudes among our learners. First, we need to show enthusiasm and interest in pain management in front of our students and trainees. Second, we need to model compassion, empathy, and respect for every patient. Students should understand that patients with chronic pain often feel stigmatized, distrusted, and isolated [17]. When talking with students, we should avoid stigmatizing terms like “drug seeker.” Our students should understand that because a diagnostic study does not show an obvious pain generator uncommonly, pain symptoms are medically unexplained [18]. Even if the cause of pain is known, there is an imperfect correlation between the subjective nature and severity of pain and the “objective” findings seen on diagnostic studies [19].

Third, we need to create a comfortable learning environment for students in which we are actively engaged in how they learn about pain management. Fourth, while we have all had difficult and, sometimes, frustrating interactions with patients, we have also had numerous “successes.” These success stories are rewarding and should be shared with learners. Fifth, in addition to helping learners gain knowledge relevant to pain, we need to equip them with practical clinical skills that help bolster their confidence to manage the complexities of chronic pain. This may involve simply raising students’ awareness of available evidence-based guidelines and treatment algorithms, or introducing treatment concepts such as “rational polypharmacy” [20] used extensively in other chronic conditions, but not fully adopted in pain practice. Finally, we should emphasize to students that pain relief is widely recognized as a basic human right [21] and that it is our responsibility to relieve suffering whenever possible.

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