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EDITORIAL

The Lyceum for Pain Education: Providing Accessible Education on Chronic Pain and Headaches to a Global Audience

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Educational efforts in pain medicine have been a mainstay of international academic organizations for more than 50 years. For example, the International Association for the Study of Pain (IASP) was one of the first of these organizations, and continues today with a mission that includes "exchange of ideas and education to stimulate and support the study of pain and to translate that knowledge into improved pain relief worldwide".[1] However, as commercial industry sponsors found an audience for the marketing of their products and services, a number of pain educational groups went awry. By the late 1990s, external forces seemingly brought increased accountability to the field, and efforts were made to improve educational programs with transparency regarding conflicts of interest and to deliver more evidence-based content and decrease bias. Nonetheless, the problem remains especially challenging within the field of chronic pain, an area of practice in which a number of treatments continue to be supported despite inconsistent evidence for safety and efficacy.

Multiple challenges continue to face pain educators today, such as upholding standards of academic integrity, minimizing conflicts of interest and bias, and maintaining interdisciplinary communication, while remaining accessible for healthcare providers, researchers, patients, and other stakeholders. The Lyceum for Pain Education and its weekly Interdisciplinary Pain and Headache Rounds offer one such template to meet these challenges and mitigate common problems with pain education. Upon switching to a virtual format after 20 years due to the COVID-19 crisis, these seminars provide evidence-based continuing education (CE) to clinicians, researchers, and public policy makers who have an interest in a wide variety of pain topics. The programs are provided at no cost to attendees, with sponsorship derived from philanthropic efforts as opposed to industry funding. In this article, we discuss the challenges that face CE and our experience in navigating them.

Continuing Medical Education Should Uphold Standards of Academic Integrity

One significant problem that faced many CE offerings in the late 1990s was not only due to the impact of industry bias, but due to the absence of independent scientific reviewers.[2] For example, a 2007 annual report from the Accreditation Council for Continuing Medical Education (ACCME) determined that more than 30,000 CME activities each year were sponsored by for-profit medical education and communication centers that received approximately 90% of their income from commercial support.[2,3] In our experience, many CE committees play a minimal role in vetting the materials that they sponsor. Rather, speakers are recruited by program planners who are thought to be experts in the field. This model of recruitment is in contrast to the model typically utilized in scientific writing and publishing, in which a critical independent review of the scientific content is necessary.

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The field of pain medicine can easily find itself susceptible to "junk science", alongside any other field in which patient suffering is great, treatment pathways are weak, and financial incentives persist. Some may be surprised that these issues are not new, and in fact, clinicians and academicians in the 19th century fought the same battles. Oliver Wendell Holmes Sr., an early champion of evidence-based medicine, lectured and wrote extensively on the issue: "When a half-starving medical man felt that he must give his patient draught and boluses for which he could charge him, he was in a pitiable position and too likely to persuade himself that his drugs were useful to his patient because they were profitable to him".[4]

At the Lyceum for Pain Education, our Board of Directors consists of specialists in neurology, pain psychology, nursing, orofacial pain, and oral surgery from different institutions and of different backgrounds. We also include public policy experts and patients with pain for guidance, the latter being an "end user" safeguard to help us better shape the educational content. While we do our best to rigorously "vet" the lectures and content that we host, that is not to say that we have never made a mistake and occasionally host a scientific presentation that we later regret having invited. However, with hindsight, along with feedback from attendees, we continuously work to correct these mistakes and uphold standards of academic integrity.

Continuing Medical Education Should Be Wary of Industry Funding to Avoid Potential Conflict of Interest and Bias

Hospital, university-based, and professional society-based CE programs, despite being considerably expensive to maintain, are often required to be self-sustaining, with funding typically originating from program fees or industry sponsorship. The role of industry sponsorship has brought valid concerns regarding continuing medical education (CME), with risk of bias, conflicts of interest, and an overall lack of transparency. In 2015, the ACCME determined that 11% of accredited activities received commercial support. When examining individual CME providers, 40.3% obtained commercial support, 44.9% accepted advertising or exhibit revenue, and a total of 55.4% received one or both.[5]

Given the emphasis of the Pain and Headache Rounds on orofacial pain and headache, it is worth noting that within dentistry, there has been an underreporting of conflict of interest in the literature, with only 3% of dental publications reporting potential conflicts of interest.[6] Somewhat shockingly, a recent publication from a leading dental journal made recommendations for virtual conferences that include "incorporation of short-length sponsor advertisements in between sessions" and that program organizers "must select speakers that will attract the interest of participants", with no mention of academic integrity of the speakers throughout the article.[7] Whether in research or in organizing CE events, the careful appraisal of the science and potential conflicts of interest is a necessity, and one could argue that dentistry needs to do better.

Current support for the Pain and Headache Rounds largely comes from our respective institutions as well as non-profit and philanthropy funding efforts, allowing the program directors to provide open access without charges while minimizing an actual or perceived risk of bias. This model also promotes access to clinical practices in underserved areas. We encourage similar programs to consider this model, and in our experience, have no shortage of international experts and scientific speakers who agree to participate on a pro bono basis. Although there are expenses associated with virtual educational endeavors, they are minimal compared to those associated with live events and significantly reduce the conference carbon footprint.

An additional concern with industry sponsorship of CE programs is the risk that sponsors may consider the attendee list as proprietary and refuse to disclose the attendee list to the program planner. In our experience, collaboration with one former sponsor that was a healthcare facility led to marketing of commercially funded programs or other "pain education" offerings that lacked scientific credibility to a mailing list of our program's attendees. Thus, the relationship with industry sponsors became confusing, causing attendees to dis-enroll. This is no small issue that comes with an effort to promote any evidence-based program, and because of this, we now retain ownership of our attendee list. In other words, hospitals, medical, and dental schools are not immune to promoting programs that demonstrate significant bias, and some have had their reputations suffer as a result of industry relationships.[8–10]

Continuing Medical Education Should Be Accessible

When the Pain and Headache Rounds began more than 20 years ago, events were live and in-person, with attendance largely composed of faculty and fellows from local Boston hospitals and academic institutions. As with many other similar programs, we sought to broaden our base in 2016 by adding a webinar component. With a small amount of non-profit funding to evaluate and promote an educational training model for controlled substance risk as well as the COVID-19 pandemic, we switched to an entirely virtual format in 2020.

The preference for online learning is undeniable, as leaders in medical education report that only one-third or fewer medical students actually attend class in person when they have the option of watching the recorded presentation online.[11] Similarly, in dental education, the COVID-19 pandemic forced educators to quickly transition to an online delivery, which students typically preferred over classroom learning.[12,13] In CE, a study on tele-learning for the management of chronic pain administered to primary care physicians, nurse practitioners, pharmacists, and allied health professionals determined that 96% of participants (n = 117) were satisfied that the online sessions were worthwhile, enabled rapid learning and best practice dissemination, and improved quality of care of patients.[14]

We now are fortunate to reach approximately 300 attendees per week, covering 21 countries, while continuing with no fees for CE credits. As we are now beginning to actively market our offering, we anticipate that these figures will rapidly increase exponentially. In addition, as of 2020, the Pain and Headache Rounds made a concerted effort to include medically underserved populations as target populations, with a current study ongoing to assess the impact on community practice. Underscoring the need for accessible CE, clinicians in low- to middle-income countries, in particular, cite challenges with CME, such as "outdated curricula, inadequate infrastructure, fewer well-trained educators, and cultural barriers".[15,16] In the Pain and Headache Rounds, we also work to include international speakers from various clinical and academic settings sharing their experience in pain management, with speakers in Spring, 2024 hailing from Norway, Pakistan, and Kenya.

The rise in online CE yields an additional benefit of reducing the carbon footprint associated with in-person medical conferences, with estimates of United States-based conferences suggesting 19,819–39,910 metric tons of CO2 per conference (1.19–1.73 metric tons of CO2 per capita).[17,18] In comparison, the average carbon footprint of each person in the US is 14.44 metric tons.

Perhaps most importantly, there has never been a program fee for attending the Pain and Headache Rounds and attendance continues to be free of charge to help increase access to evidence-based knowledge in pain medicine.

Continuing Medical Education Should Be Interdisciplinary and Include Patients and Other Stakeholders in the Discussion

Although most agree that pain educational requires an interdisciplinary focus, we argue that this definition requires broadening. While clinicians and researchers are the primary target, it is often forgotten that patients are the end-users. We have sought to include patients and patient advocates as 10–15% of our attendees, which we have done without reducing the scientific and academic quality of the content. The response has been extraordinarily positive, and we cannot underestimate the contribution of patients who serve on our planning committee. Our format also provides the involvement of patients in determining program content. In addition, we have found that public policy makers have become regular attendees, irrespective of the program content. Specifically, one of our attendees and contributors is a senior judge in the state of Massachusetts.

We also believe that it is important that any evidence-based CE program places its content in historical context. While Pain Medicine has been considered a relatively new field, work in this area has spanned the past several centuries. Failing to rely on evidence-based approaches to pain management continues to be a pernicious weakness in a field in which outcome data are often lacking. Weaving this perspective into pain education, examples of programs highlighting the history of pain management have included a review of early evidence-based work of Oliver Wendell Holmes, Sr.,[19] the barriers facing women physicians in 19th century New England, desperate searches for a trigeminal neuralgia cure from John Locke, and a treatise from an academic hematologist on pain in the context of reviewing the early miracle archives of the Vatican.

In the absence of evidence, academic speakers often informally comment on the vast array of treatments within their clinical practices, and the directors at the Lyceum of Pain Education have a policy of pushing back. As Holmes wrote

regarding such comments, "those kind friends who suggest to a person suffering from a tedious complaint… are apt to enforce their suggestion by adding, that 'at any rate it can do no harm.' This may or may not be true as regards the individual. But it always does very great harm to the community to encourage ignorance, error, or deception in a profession which deals with the life and health of our fellow-creatures".[4] All pain education should be held to the same high standard.

It is important that this analysis notes the recent relationships that we have developed with other entities that are also dedicated to improving the quality of and access to pain management education. First, as part of its affiliation with the American Society of Pain and Neuroscience (ASPN), the *Journal of Pain Research* will collaborate with the Lyceum for Pain Education and its weekly Interdisciplinary Pain and Headache Rounds and consider selected contributions to the Interdisciplinary Pain and Headache Rounds for publication as articles in the journal. Having recently developed a new section on Education and Early Career Investigators, the publishers of the Journal have demonstrated a strong concern for improving pain education in the US and abroad, and the Journal's support is greatly appreciated. Second, the American Society of Pain and Neuroscience (ASPN), the rapidly developing leader in worldwide pain management education, will continue to collaborate closely on the promotion of evidence-based pain education. Our weekly speakers over the past year have included a number of luminaries of ASPN, and this official association will ensure that much of the education that we provide in pain management will mirror the cutting-edge developments that this Society is pioneering. Our gratitude toward the Journal of Pain Research and ASPN for helping us foster this symbiosis cannot be overstated.

The weekly Pain and Headache Rounds continues to offer CME credits as well as dental CE, nursing CE and psychology CE, with support from the Massachusetts General Hospital Department of Neurology as well as several grants and gracious benefactors. Faculty volunteer their time to provide supervision from multiple schools including Tufts University, the University of Michigan, Harvard Medical School and School of Dental Medicine, Rutgers University, and many others. In order to register for the Rounds on a one-time basis and receive weekly links via email allowing for access to the programs, please go to the following link: https://www.painandheadacherounds.com/

Disclosure

Dr Michael Schatman is a research consultant for Apurano, outside the submitted work. The authors report no other conflicts of interest in this work.

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