

Why pain physicians should consider becoming headache specialists: bridging the gap in patient care

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Headaches are among the most common conditions that physicians encounter in their daily practice. Migraine alone affects 47 million people, nearly 15% of the US population.¹ Moreover, migraine tends to impact patients during their most productive years. It has been estimated that migraine affects 24.4% of women and 7.4% of men between the ages of 30 and 39. According to the 2016 Global Burden of Disease report, migraine is the leading cause of years lived with disability among patients between the ages of 15 and 49.¹

Nevertheless, it's important to acknowledge that headache medicine remains a relatively recent subspecialty. The inaugural United Council for Neurologic Subspecialties (UCNS) certification examination for headache medicine was introduced in 2006, certifying a total of 105 physicians. Interestingly, within this group, there was just a single anesthesiologist and pain medicine specialist (SN).²

Unfortunately, within the realm of neurology, headache medicine often receives little attention. It tends to be neglected or sidelined during medical education and residency training, creating a perception that it is of lesser importance compared with what is considered more "real" neurology like stroke and movement disorders. On the other hand, pain physicians who may be well suited to managing individuals with headache disorders are traditionally not adequately trained in headache medicine during their fellowship.³

In *Regional Anesthesia and Pain Medicine Journal*, Yuan *et al* published an educational piece to help raise awareness and debunking myths in headache diagnosis for pain physicians.⁴

GLOBAL HEALTHCARE GAP IN THE FIELD OF HEADACHE MEDICINE

The WHO declared headaches have been underestimated, under-recognized and undertreated throughout the world, and lack of knowledge among healthcare providers is the principal clinical barrier to effective care.⁵

The majority of US medical schools do not include a curriculum focused on headache medicine. Additionally, most primary care physicians, who are responsible for initial headache evaluation and management, do not undergo formal training in this field. The average time devoted to headache education was only 3 hours among medical schools.⁶

Although neurologists are the specialists who traditionally attend to patients with headache disorders, their training in this area is frequently insufficient. Only 26% of neurology residency programs

have a mandatory headache clinic rotation, and most of these rotations are limited to 4 weeks.⁷

A notable subset of patients experiences "refractory" headaches, characterized by debilitating headache disorders resistant to conventional treatment methods. In such cases, the judicious and timely use of interventional treatment options can assist physicians in addressing previously untreated factors that have contributed to the headaches becoming refractory to traditional treatments.⁸ The exposure to interventional treatment options varies considerably among different neurology residency training programs, often limited to procedures such as onabotulinum toxin injections, peripheral nerve blocks, and trigger point injections.⁹

Pain physicians can bring unique expertise to patients suffering from chronic intractable headaches. Their proficiency in a range of interventional and neuromodulation techniques equips them to provide effective relief for intractable headache patients when appropriately used. Nevertheless, a recent survey of pain medicine program directors revealed that although most pain fellows receive some education in head and facial pain, there were significant disparities in the extent and comprehensiveness of education offered. More than 15% of surveyed programs reported that their fellows did not receive an adequate education in headache and facial pain management.³

SHORTAGE OF HEADACHE MEDICINE SPECIALISTS

A significant shortage of qualified headache specialists is evident within the USA. In 2020, there were only 564 headache specialists accredited by the UCNS in the USA. However, the existing requirement far surpasses this number. In 2020, a conservative estimation places the demand for headache specialists at approximately 3700, aiming to address only patients impacted by migraines, and not taking into consideration other headache disorders. With the projected growth of the population, it is predicted that 4500 headache specialists are needed by the year 2040.¹⁰

Recognizing the substantial and urgent demand for headache specialists in addressing a critical public need, the American Interventional Headache Society was established in 2015. It introduced a comprehensive curriculum aimed at effectively educating and training pain physicians in headache medicine. The American Board of Headache Medicine administered its inaugural examination in 2017, resulting in the certification of approximately 25 board-certified headache specialists to



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date.¹¹ This development has paved the way for pain fellowship-trained physicians who meet the headache board's prerequisites to qualify for certification, even without the completion of a formal headache medicine fellowship. Being a headache specialist allows pain physicians to apply their interventional expertise specifically to headache patients, offering a wider range of treatment options.

ASRA PAIN MEDICINE AND RAPM JOURNAL

Mentorship plays a pivotal role in sparking interest in the field of headache medicine, making it one of the foremost reasons for cultivating such interest.¹² To enhance the accessibility and caliber of mentorship, ASRA Pain Medicine introduced the ASRA Mentor Match Program. This initiative offers abundant opportunities to connect trainees and early-career clinicians with potential mentors and valuable research prospects.¹³ Matching individuals with an interest in headache medicine to experienced mentors can be incredibly valuable.

Moreover, ASRA Pain Medicine Headache and Facial Pain Special Interest Group (SIG) promotes the exchange of information, ideas, and innovations concerning the diagnoses, treatments and interventions for headache and facial pain disorders. The SIG works to define fellowship learning objectives, develop curricula, standardize approaches, and identify areas of research need.¹⁴ The SIG leadership contributed the article "Debunking myths in headache diagnosis for the pain practitioner" in this issue of *RAPM*.⁴

The *RAPM* journal, serving as the voice of ASRA Pain Medicine and its affiliated societies, maintains a steadfast dedication to advancing the field of headache medicine in conjunction with a broad spectrum of acute and chronic pain topics. This commitment is clearly demonstrated through recent publications, including the multisociety consensus recommendations for managing postdural puncture headache, cervical facet interventions, ketamine and lidocaine infusion, and numerous other research papers.^{15–20}

In conclusion, there are numerous reasons for optimism regarding pain physicians' enthusiasm for pursuing essential education and training in headache medicine and obtaining certifications as specialists in this field.

We eagerly support the expansion of headache medicine training, both within Pain Medicine fellowships and through postgraduate training for practicing pain physicians. Fortunately, there are now accessible resources enabling pain physicians to obtain the necessary education, training, and certification.

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REFERENCES

- GBD 2016 Headache Collaborators. Global, regional, and national burden of migraine and tension-type headache, 1990–2016: a systematic analysis for the global burden of disease study 2016. *Lancet Neurol* 2018;17:954–76.
- United Council for Neurological Subspecialties (UCNS). Available: https://www.ucns.org/Online/Online/About_UCNS.aspx?hkey=0d6e0a0c-8e05-4815-9698-79d0711b1369 [Accessed 30 Sep 2023].
- Kohan L, Narouze S, Souza D. Do pain medicine fellowships provide adequate education in head and facial pain? A survey of pain medicine fellowship program directors. *Ann Head Med* 2020;02:05.
- Yuan H, Strutner S, Yuh C, et al. Debunking myths in headache diagnosis for the pain practitioner. *Reg Anesth Pain Med* 2023;rapm-2023-104803.
- World Health Organization. Headache disorders. Available: <https://www.who.int/en/news-room/fact-sheets/detail/headache-disorders> [Accessed 24 Aug 2023].
- Gallagher RM, Alam R, Shah S, et al. Headache in medical education: medical schools, neurology and family practice residencies. *Headache* 2005;45:866–73.
- Ahmed ZA, Faulkner LR. Headache education in adult neurology residency: a survey of program directors and chief residents. *Headache* 2016;56:871–7.
- Feoktistov A, Kohan L. Refractory headaches and the role of interventional headache medicine. *Ann Head Med* 2020;01:05.
- Robbins MS, Robertson CE, Ailani J, et al. Procedural headache medicine in neurology residency training: a survey of US program directors. *Headache* 2016;56:79–85.
- Begasse de Dhaem O, Burch R, Rosen N, et al. Workforce gap analysis in the field of headache medicine in the United States. *Headache* 2020;60:478–81.
- American Board of Headache Medicine. Available: <https://headacheboard.com/certification-recipients> [Accessed 30 Sep 2023].
- Huang H, Minen MT. Eleven reasons people decide to choose headache medicine: there may be a headache medicine provider shortage but there are ways to foster interest. *Headache* 2020;60:1846–52.
- ASRA Pain Medicine Mentor Match Program. Available: <https://www.asra.com/the-asra-family/special-interest-groups/physician-mentorship-and-leadership-development/resources> [Accessed 30 Sep 2023].
- ASRA Pain Medicine Headache and Facial Pain Special Interest Group. Available: <https://www.asra.com/the-asra-family/special-interest-groups/headache-sig> [Accessed 30 Sep 2023].
- Schulman EA, Peterlin BL, Lake AE 3rd, et al. Defining refractory migraine: results of the RHSIS Survey of American Headache Society Members. *Headache* 2009;49:509–18.
- Uppal V, Russell R, Sondekoppam RV, et al. Evidence-based clinical practice guidelines on postdural puncture headache: a consensus report from a multisociety international working group. *Reg Anesth Pain Med* 2023;rapm-2023-104817.
- Hurley RW, Adams MCB, Barad M, et al. Consensus practice guidelines on interventions for cervical spine (facet) joint pain from a multispecialty international working group. *Pain Med* 2021;22:2443–524.
- Yuan H, Natekar A, Park J, et al. Real-world study of intranasal ketamine for use in patients with refractory chronic migraine: a retrospective analysis. *Reg Anesth Pain Med* 2023;48:581–7.
- Schwenk ES, Walter A, Torjman MC, et al. Lidocaine infusions for refractory chronic migraine: a retrospective analysis. *Reg Anesth Pain Med* 2022;47:408–13.
- Shah S, Calderon M-D, Crain N, et al. Effectiveness of onabotulinumtoxinA (BOTOX) in pediatric patients experiencing migraines: a randomized, double-blinded, placebo-controlled crossover study in the pediatric pain population. *Reg Anesth Pain Med* 2021;46:41–8.