



Migraine Care for All

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Disclosures: Teshamae Monteith



- **Disclosures (past three years)**
- **Clinical Trials**
 - Site Principal Investigator for studies sponsored by Eli Lilly and AbbVie (all payments to institution).
- **Advisory Boards / Consultancy**
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 - Associate Editor: *Cephalalgia*, *Continuum Audio*.
 - Deputy Editor: *Neurology Minute*, *NEJM Journal Watch Neurology*.
 - Editorial Board: *Neurology*, *American Migraine Foundation*, *Brain & Life Magazine*.
- **Professional Service (Unpaid)**
 - Board of Directors, International Headache Society (2021–2023).
 - Executive Board, Florida Society of Neurology (current).



Learning Objectives



Upon completion of this activity, learners will be able to



Recognize disparities, the impact of social determinants of health, and barriers in migraine care



Apply IHS recommendations for essential and optimal care



Evaluate interventions that improve access and equity



Advocate for raising the global standard of migraine care

Global Burden of Migraine: Disability and Disease Burden



Migraine is the 4th cause of YLDs, 2nd among young adults (GBD 2021)

- Functional impairment at work, school, home
- Chronic migraine = higher disability, psychiatric comorbidities
- Cognitive impact: attention, memory, executive function deficits
- Cumulative burden: frequent attacks → sensitization → chronicity

Cephalalgia
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<https://doi.org/10.1177/03331024241267309>

Sage Journals

Viewpoint/Perspective



Migraine is the most disabling neurological disease among children and adolescents, and second after stroke among adults: A call to action

Mario Fernando Prieto Peres ^{1,2}, Simona Sacco ³, Patricia Pozo-Rosich ⁴, Cristina Tassorelli ^{5,6}, Fayyaz Ahmed ⁷, Rami Burstein ⁸, Sait Ashina ⁸, Derya Uluduz ⁹, Andreas Kattem Husøy ¹⁰, and Timothy J Steiner ^{10,11,12}



Global, regional, and national burden of disorders affecting the nervous system, 1990–2021: a systematic analysis for the Global Burden of Disease Study 2021

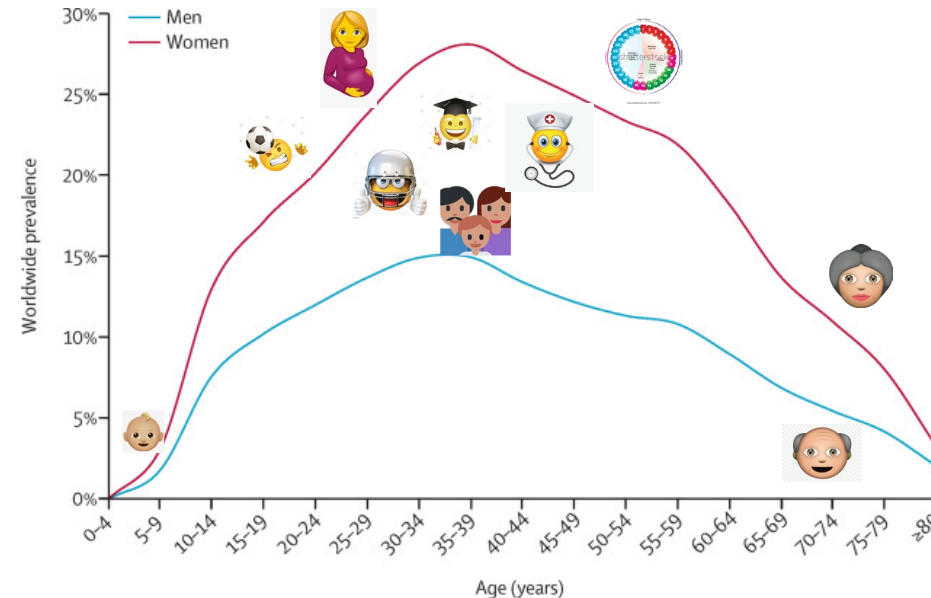


GBD 2021 Nervous System Disorders Collaborators*

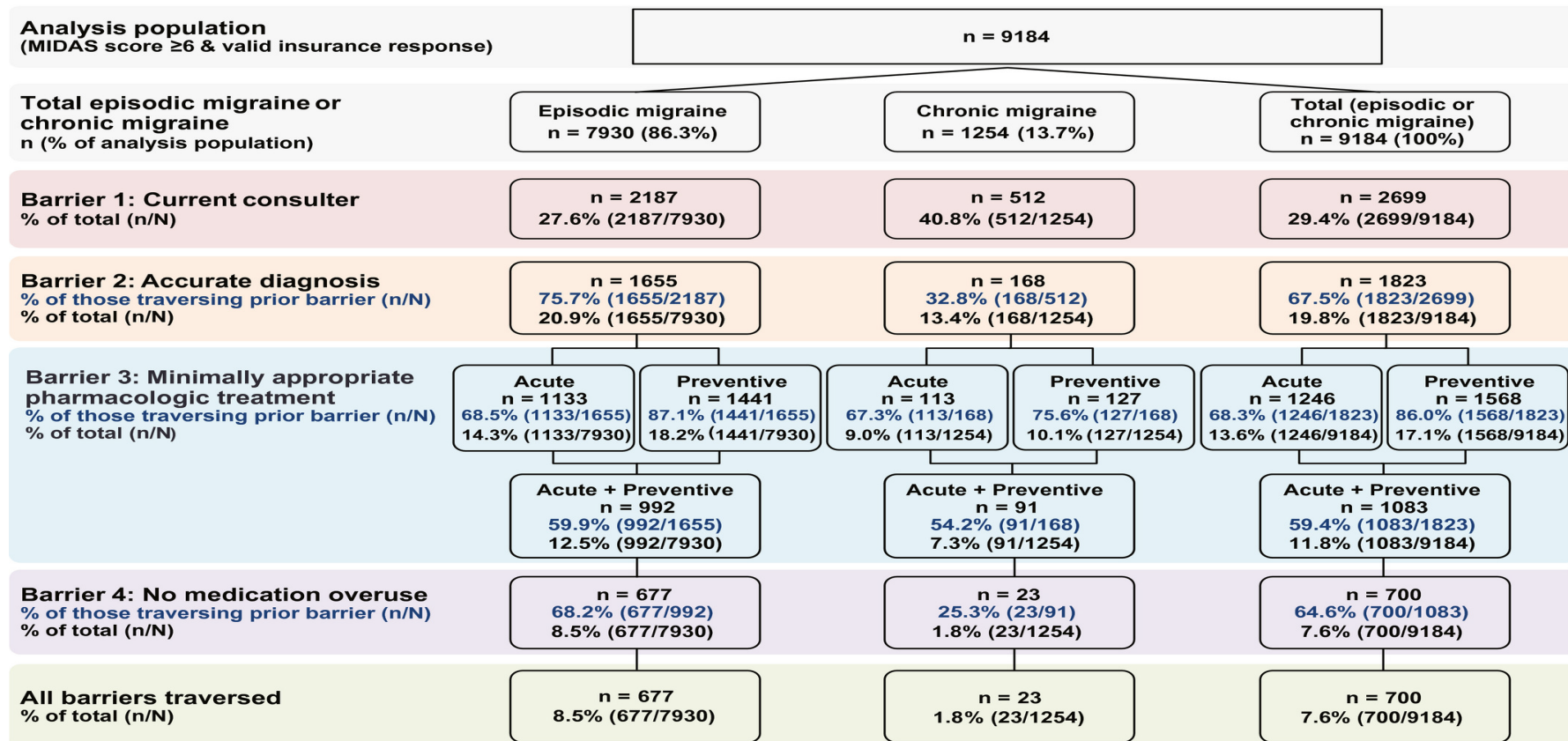
	Global	Central Europe, eastern Europe, and central Asia			High-income					Latin America and Caribbean				North Africa and Middle East		South Asia			Southeast Asia, east Asia, and Oceania		Sub-Saharan Africa			
		Central Asia	Central Europe	Eastern Europe	Australasia	High-income Asia Pacific	High-income North America	Southern Latin America	Western Europe	Andean Latin America	Caribbean	Central Latin America	Tropical Latin America			East Asia	Oceania	Southeast Asia	Central sub-Saharan Africa	Eastern sub-Saharan Africa	Southern sub-Saharan Africa	Western sub-Saharan Africa		
Stroke	1	1	1	1	2	1	1	1	2	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Neonatal encephalopathy	2	3	10	8	10	8	9	6	9	3	2	5	5	5	2	4	4	3	2	2	2	2	2	2
Migraine	3	2	2	2	1	3	2	2	1	2	4	3	2	2	3	3	3	2	5	6	3	4		
Dementia	4	4	3	3	3	2	3	3	3	5	5	4	3	4	5	2	5	4	3	4	5	5		
Diabetic neuropathy	5	5	4	4	5	4	4	4	4	4	3	2	4	3	6	5	2	5	6	7	4	6		
Meningitis	6	16	21	18	20	20	22	16	21	19	7	17	16	15	8	16	9	6	4	3	6	3		
Epilepsy	7	6	7	11	8	6	8	7	7	6	6	6	6	6	7	9	6	9	7	5	7	7		
Preterm birth*	8	9	9	14	7	7	6	8	8	9	8	8	8	8	4	11	7	8	10	10	9	10		
Autism spectrum disorder	9	8	6	5	4	5	5	5	5	8	9	7	9	9	11	7	10	7	9	9	8	9		
Nervous system cancer	10	7	5	6	6	11	7	9	6	7	10	9	7	7	13	6	18	11	19	13	12	21		

Migraine Across the Lifespan and Special Populations

- Children and Adolescents: Pediatric Management of Migraine
- Gender and Migraine: Pregnancy, Lactation, Menopause, and Hormonal considerations
- Migraine in Older Age
- Dizziness and Vestibular Migraine
- Posttraumatic Headache and Headache Associated with Traumatic Brain Injuries



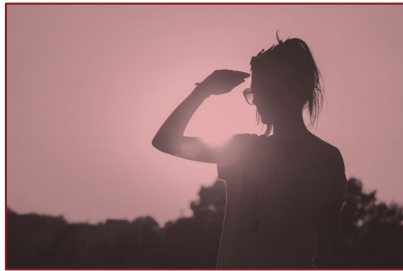
Barriers to Care in Episodic and Chronic Migraine: Results from the Chronic Migraine Epidemiology and Outcomes Study



3-Question Screener: ID Migraine



During the **last 3 months**, did you have the following with your headaches:



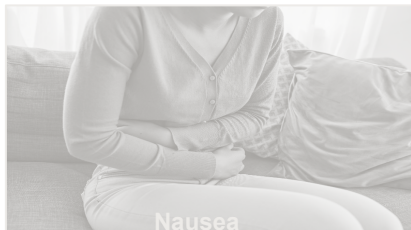
Photophobia

Light bothered you (a lot more than when you don't have headaches)



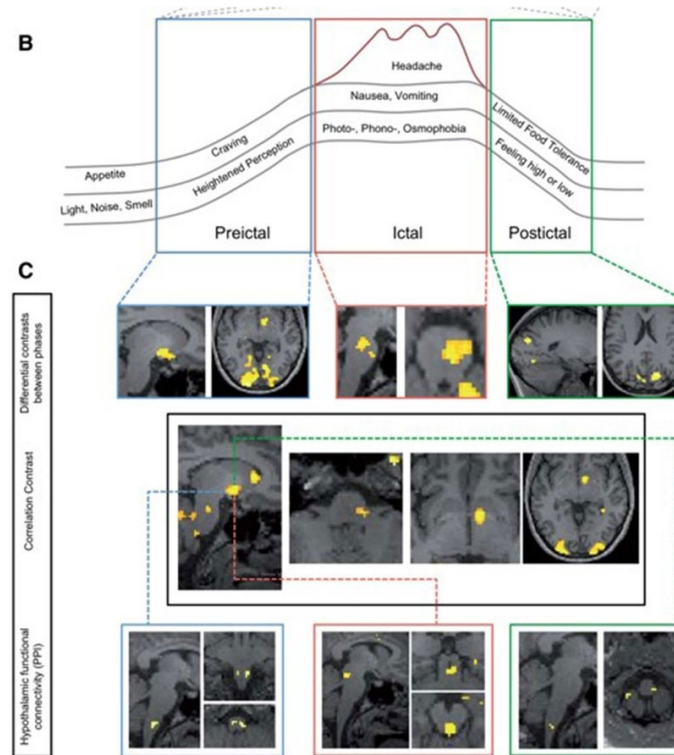
Impairment

Your headaches limited your ability to work, study or do what you needed to do for at least one day



Nausea

You felt nauseated or sick to your stomach



“PIN” the migraine diagnosis
“Yes” to 2 or 3 questions = 93% have migraine

American Headache Society, First Contact Program

Figure published in Karsan N et al, Imaging the Premonitory Phase of Migraine, Frontiers in Neurology, 25 March 2020
Neurology. 2003;61:375-382./



Social Determinants of Health and Migraine Patterns throughout Life

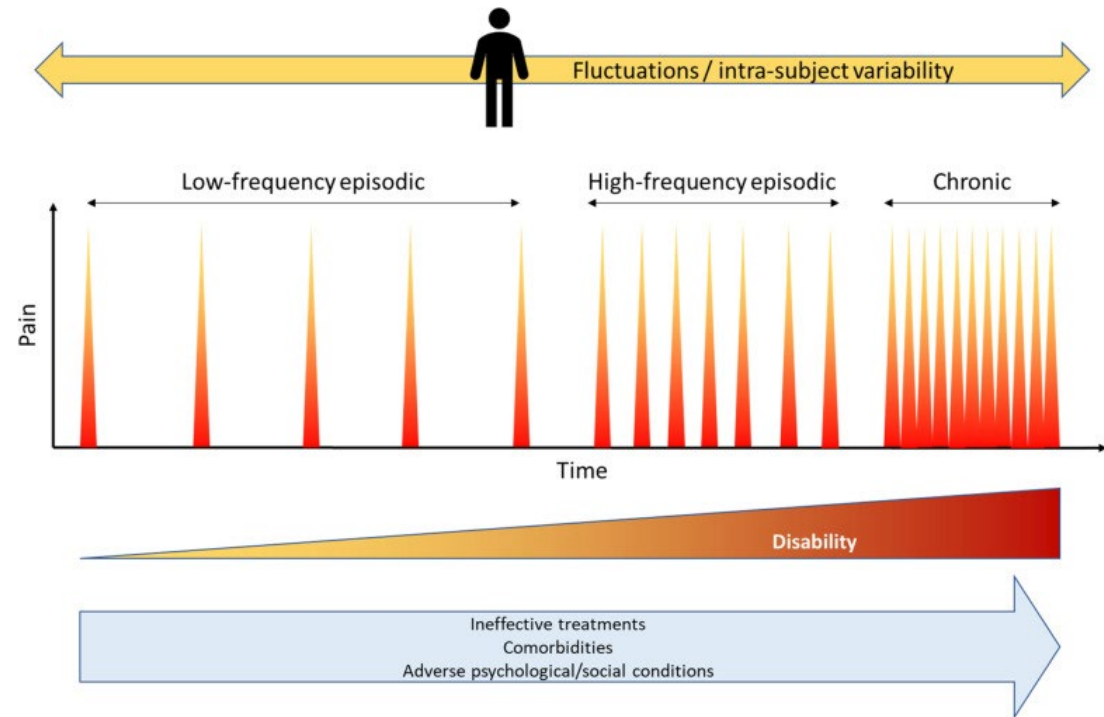
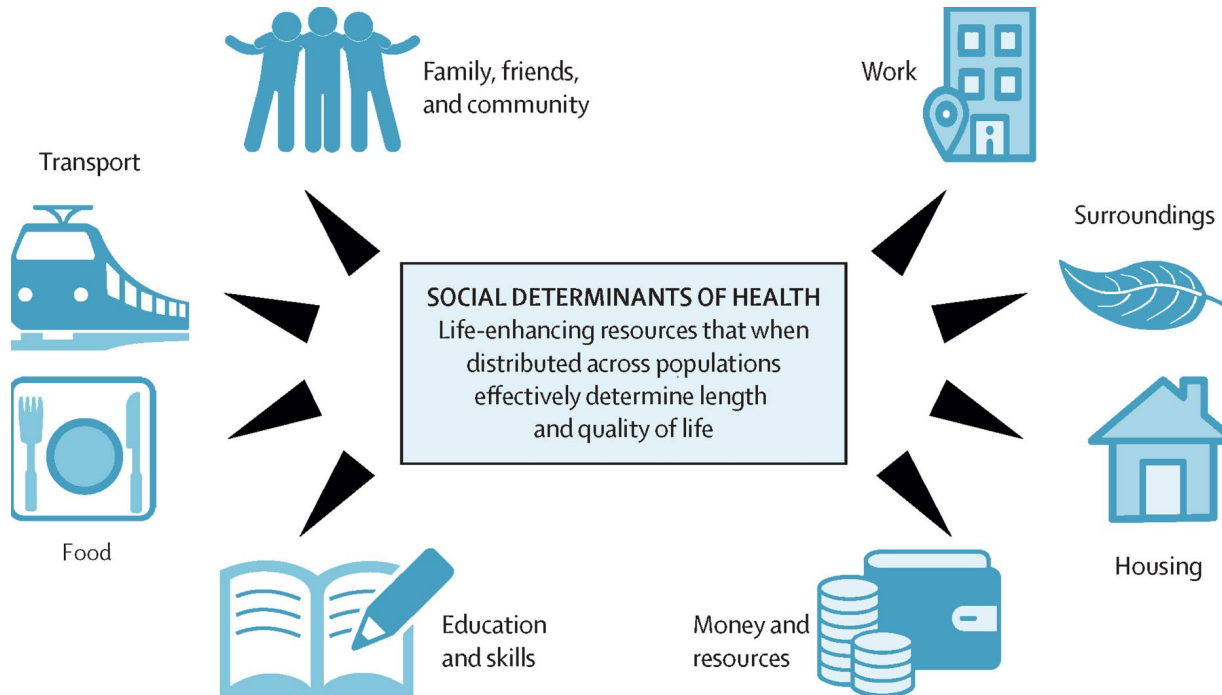


Figure taken from Dobson R et al. Social determinants of neurological disease: tackling inequalities. Lancet Neurol. 2022

Figure taken from Sacco S. Applying a biopsychosocial model to migraine: rationale and clinical implications. J Headache Pain. 2022

Perceived Discrimination and Migraine-Specific Quality of Life



Getz M, Charleston IV L, Armand CE, Willis AW, Seng E. Headache. 2025. PMID: 40454748

- N=91 Black/African American adults with migraine (tertiary center, Oct 2023–Apr 2024)
- Measures: MSQoL Questionnaire, PEDQ-CV (lifetime), DMS (medical settings), MIDAS items

Results:

- Lifetime discrimination → worse MSQoL ($\beta=-0.30$, $p=0.004$)
- Medical setting discrimination → worse MSQoL ($\beta=-0.27$, $p=0.016$)
- Pain intensity → worse MSQoL ($\beta=-0.43$, $p<0.001$)
- Headache frequency & sex at birth: NS
- Variance explained: 28.3–31.6%

Conclusion:

Discrimination (lifetime & medical) significantly worsens migraine-specific QoL, independent of headache burden.

Highlights need for bias reduction, better pain management, and culturally competent interventions.



AHS Goals of Care for Migraine



Acute	Preventive
Rapid and consistent freedom from pain and associated symptoms, especially the most bothersome symptom, without recurrence	Reduce attack frequency, severity, duration, and disability
Restored ability to function	Improve responsiveness to and avoid escalation in use of acute treatment
Minimal need for repeat dosing or rescue medications	Improve function and reduce disability
Optimal self-care and reduced subsequent use of resources (e.g., emergency room visits, diagnostic imaging, clinician and ambulatory infusion center visits)	Reduce reliance on poorly tolerated, ineffective, or unwanted acute treatments
Minimal or no adverse events (AEs)	Reduce overall cost associated with migraine treatment
Cost considerations	Enable patients to manage their own disease to enhance a sense of personal control
	Improve health-related quality of life (HRQoL)
	Reduce headache-related distress and psychological symptoms

Drug Classes – can be used Acutely or Preemptive



Non-steroidal anti-
inflammatories
aspirin, celecoxib oral
solution, diclofenac,
ibuprofen, naproxen

Neuroleptics/anti-emetics
chlorpromazine, droperidol,
metoclopramide,
prochlorperazine,
promethazine

Acetaminophen
Combination analgesic
(caffeine/ASA/acetaminophen)

triptans

Dihydroergotamine,
ergotamine, ergotamine
derivatives

Gepants
Ubrogepant
Rimegepant (flexible use)
Zavegepant

Ditan
Lasmiditan

AHS Updated recommendations for migraine prevention



- 1. Diagnosis of episodic migraine with or without aura (4–14 MMDs) based upon ICHD-3 with at least moderate disability (MIDAS score ≥ 11 or HIT-6 score > 50). Treatments to consider include:**
1. $\dagger$ Topiramate
 2. $\dagger$ Divalproex sodium/valproate sodium
 3. Beta-blocker: metoprolol, $\dagger$ propranolol, $\dagger$ timolol, atenolol, nadolol
 4. Candesartan
 5. Tricyclic antidepressant: amitriptyline, nortriptyline
 6. Serotonin-norepinephrine reuptake inhibitor: venlafaxine, duloxetine
 7. Other Level A or B treatments (established efficacy or probably effective) according to AAN scheme for classification of evidence
 8. Monoclonal antibodies targeting CGRP or its receptor including $\dagger$ erenumab, $\dagger$ fremenezumab, $\dagger$ galcanezumab, or $\dagger$ eptinezumab
 9. **Small-molecules targeting the CGRP receptor (“gepants”) including $\dagger$ atogepant and $\dagger$ rimegepant**

AHS Updated recommendations for migraine prevention



1. Diagnosis of chronic migraine with or without aura (≥ 15 MHDs) based upon ICHD-3. Treatments to consider include:

1. Topiramate
2. Divalproex sodium/valproate sodium
3. Beta-blocker: metoprolol, propranolol, timolol, atenolol, nadolol
4. Candesartan
5. Tricyclic antidepressant: amitriptyline, nortriptyline
6. Serotonin-norepinephrine reuptake inhibitor: venlafaxine, duloxetine
7. Other Level A or B treatments (established efficacy or probably effective) according to AAN scheme for classification of evidence
8. [‡]OnabotulinumtoxinA
9. Monoclonal antibodies targeting CGRP or its receptor including erenumab, fremanezumab, galcanezumab, or eptinezumab
10. Small-molecules targeting the CGRP receptor (“gepants”) including atogepant

IHS Initiatives to Improve Access to Medications

Guidelines



International Headache Society global practice recommendations for the acute pharmacological treatment of migraine

Francesca Puledda ¹, Simona Sacco², Hans-Christoph Diener ³, Messoud Ashina^{4,5}, Haidar M. Al-Khazali⁴, Sait Ashina ^{5,6}, Rami Burstein⁷, Eric Liebler⁸, Andrea Cipriani^{9,10,11}, Min Kyung Chu ¹², Alexandra Cocores¹³, Freda Dodd-Glover¹⁴, Esme Ekizoglu¹⁵, David Garcia-Azorin ¹⁶, Carl Göbel^{17,18}, Maria Teresa Goicochea¹⁹, Amr Hassan²⁰, Koichi Hirata²¹, Jan Hoffmann ¹, Bronwyn Jenkins²², Katharina Kamm ²³, Mi Ji Lee ²⁴, Yu-Hsiang Ling ^{25,27}, Marco Lisicki²⁷, Daniele Martinelli ²⁸, Teshamae S. Monteith ¹³, Raffaele Ornello ², Aynur Ozge²⁹, Mario Peres ³⁰, Patricia Pozo-Rosich ³¹, Volodymyr Romanenko³², Todd J. Schwedt³³, Marcio Nattan P. Souza ³⁴, Tsubasa Takizawa³⁵, Gisela M. Terwindt³⁶, Janu Thuraiayah ⁴, Mansoureh Togha ^{37,38}, Nicolas Vandenbussche^{39,40}, Shuu-Jiun Wang ^{25,26,41}, Shengyuan Yu ⁴², and Cristina Tassorelli ^{28,43}

Guidelines



International Headache Society Global Practice Recommendations for Preventive Pharmacological Treatment of Migraine

Francesca Puledda ^{1,*}, Simona Sacco^{2,*}, Hans-Christoph Diener ³, Messoud Ashina^{4,5}, Haidar M. Al-Khazali ⁴, Sait Ashina ^{5,6}, Rami Burstein ⁷, Eric Liebler⁸, Andrea Cipriani^{9,10,11}, Min Kyung Chu ¹², Alexandra Cocores¹³, Freda Dodd-Glover¹⁴, Esme Ekizoglu¹⁵, David Garcia-Azorin ¹⁶, Carl H. Göbel^{17,18}, Maria Teresa Goicochea¹⁹, Amr Hassan²⁰, Koichi Hirata²¹, Jan Hoffmann ²², Bronwyn Jenkins²³, Katharina Kamm ²⁴, Mi Ji Lee ²⁵, Yu-Hsiang Ling ^{26,27}, Marco Lisicki ²⁸, Daniele Martinelli ²⁹, Teshamae S. Monteith ¹³, Raffaele Ornello ², Aynur Özge³⁰, Mario Fernando Prieto Peres ³¹, Patricia Pozo-Rosich ³², Volodymyr Romanenko³³, Todd J. Schwedt ³⁴, Marcio Nattan P Souza ³⁵, Tsubasa Takizawa³⁶, Gisela M. Terwindt³⁷, Janu Thuraiayah ⁴, Mansoureh Togha ^{38,39}, Nicolas Vandenbussche^{40,41}, Shuu-Jiun Wang ^{26,27,42}, Shenguan Yu ⁴³, and Cristina Tassorelli ^{29,44}

Brief Communication



Worldwide availability of medications for migraine and tension-type headache: A survey of the International Headache Society

Francesca Puledda ¹, Irene de Boer ², Roberta Messina ³, David Garcia-Azorin ⁴, Marcio Nattan Portes Souza ⁵, Mohammad Al-Mahdi Al-Karagholi ⁶, Olivia Begasse de Dhaem ⁷, Cristina Tassorelli ^{8,9}, and Arne May ¹⁰



IHS Practice Recommendations (Q10–Q17)



Q#	Clinical Question	Optimal	Essential
10	Headache relapse?	Repeat dose; switch class; triptan + NSAID viable	Same, within dose limits; wait ≥ 2 h
11	Status migrainosus (>72h)	IM/SC NSAID or triptan, DHE+antiemetic; IV options; avoid opioids	Same; IV dexamethasone option
12	Max days of acute meds	NSAIDs/analgesics <10d/mo; triptans <8d/mo	Same
13	Pregnancy/breastfeeding	Acetaminophen $\pm$ triptans; add metoclopramide; cautious NSAIDs	Same
14	Children/adolescents	Acetaminophen/ibuprofen; triptans second line; add metoclopramide	Same
15	>65 years	Acetaminophen 1st; NSAIDs 2nd; triptans 3rd; gepants/lasmiditan alt.	Same; triptan+NSAID combo; caution antiemetics
16	Vascular disease/stroke/HTN	Acetaminophen 1st; gepants/lasmiditan 2nd; triptans cautious; avoid ergots	Same with available treatments; avoid ergots
17	Menstrual migraine	NSAID/triptan 1st; combos, gepants, short-term prevention, hormonal if refractory	Same with available options

IHS Practice Recommendations (Q1–Q9)



Q#	Clinical Question	Optimal	Essential
1	Triptans if NSAIDs fail?	Switch to a triptan	Switch to any available triptan
2	Increase triptan dose?	Max dose → switch triptan/class if ineffective	If only sumatriptan 50 mg → increase to 100 mg
3	Switch to another triptan?	Try up to 3 triptans, then switch class	Same, or combine with NSAID/antiemetic
4	Nausea/vomiting – add antiemetic?	Add antiemetic; fixed combos possible	Same as Optimal
5	Triptan partial response – combine?	Sumatriptan + naproxen preferred; or triptan + NSAID	Any triptan + NSAID
6	Gepants/lasmiditan role?	Option if triptans not tolerated/effective	Not applicable
7	Ergots?	Only if other acute treatments fail	Same as Optimal
8	Timing of acute treatment?	Early in headache phase	Same as Optimal
9	Early vomiting?	Non-oral routes, ODTs; add antiemetic	Same as Optimal



IHS Practice Recommendations – Prevention (Q1–Q8)



Q#	Clinical Question	Optimal	Essential
1	Who is a candidate for prevention?	≥4 MHDs, life impact, ineffective acute tx, or frequent acute use	Same as Optimal
2	When to assess effectiveness?	Oral: 3mo; Injectables: 3–6mo at target dose	Oral: 3mo at target dose
3	If initial drug fails?	Switch class; consider BoNTA, anti-CGRP mAbs, gepants if multiple failures	Switch class; may retry within class if multiple failures
4	Combination therapy?	Combine 2 preventives if inadequate benefit or for comorbidities; BoNTA/anti-CGRP easy to combine	Combine if inadequate benefit or comorbidities; caution with oral combos
5	Duration of therapy?	Oral ≥6mo; Non-oral ≥12mo; longer in chronic; stop if <4 MMDs × 3mo or patient satisfied	Oral ≥6mo; longer in chronic; stop if <4 MMDs × 3mo or patient satisfied
6	Success criteria?	≥50% ↓ MMDs; subjective improvement; improved MIDAS/HIT-6; in refractory chronic, ≥30% acceptable	Any meaningful subjective improvement without side effects
7	Criteria to restart?	Restart ≥1mo after stopping if still meets criteria; monitor with diary	Same as Optimal
8	Role of comorbidities?	Start with migraine-specific drugs; if comorbidities, choose agent that helps both	If migraine-specific not available, select by comorbidities

IHS Practice Recommendations – Prevention (Q9–Q16)



Q#	Clinical Question	Optimal	Essential
9	Chronic migraine drugs?	Atogepant, mAbs, BoNTA, topiramate (avoid in pregnancy/without contraception)	Topiramate (avoid in pregnancy); if not effective, amitriptyline, BBs, valproate; combos if needed
10	Switching anti-CGRP mAb?	Switch to another if no other viable options	Not applicable
11	Residual burden on anti-CGRP?	Add oral preventive or BoNTA (if chronic)	Not applicable
12	Greater occipital nerve blocks?	Limited evidence; option including in pregnancy	Same as Optimal
13	Children/adolescents?	BBs or flunarizine; if fail, low-dose topiramate or amitriptyline	BBs; if fail, low-dose topiramate or amitriptyline
14	Pregnancy/lactation?	Prefer non-pharmacologic or nerve blocks; if needed: propranolol, amitriptyline, BoNTA (caution); avoid valproate/topiramate	Non-pharmacologic or nerve blocks; if needed: propranolol, amitriptyline; avoid valproate/topiramate
15	Older adults >65?	Select by comorbidities; monitor closely; anti-CGRP safe up to 80; BoNTA option	Select by comorbidities; monitor closely
16	Medication overuse?	Reduce/stop overused drug + start prevention; anti-CGRP/BoNTA/topiramate effective even with overuse; hospitalize opioid/barbiturate overusers	Reduce/stop overused drug + start prevention; topiramate effective; careful monitoring if opioids/barbiturates

Improving access to CGRP Inhibitors for Migraine



FEATURE ARTICLE |  **Free Access**

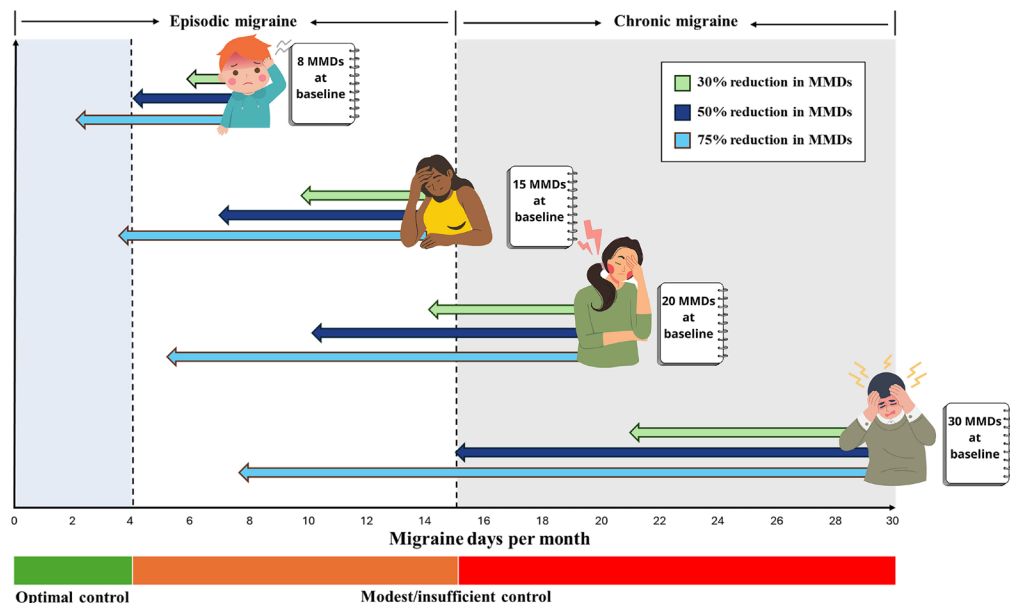
Calcitonin gene-related peptide-targeting therapies are a first-line option for the prevention of migraine: An American Headache Society position statement update

Andrew C. Charles MD , Kathleen B. Digre MD, Peter J. Goadsby MD, PhD, Matthew S. Robbins MD, Andrew Hershey MD, PhD, The American Headache Society



Raising Higher Standards: IHS (2024) statement:

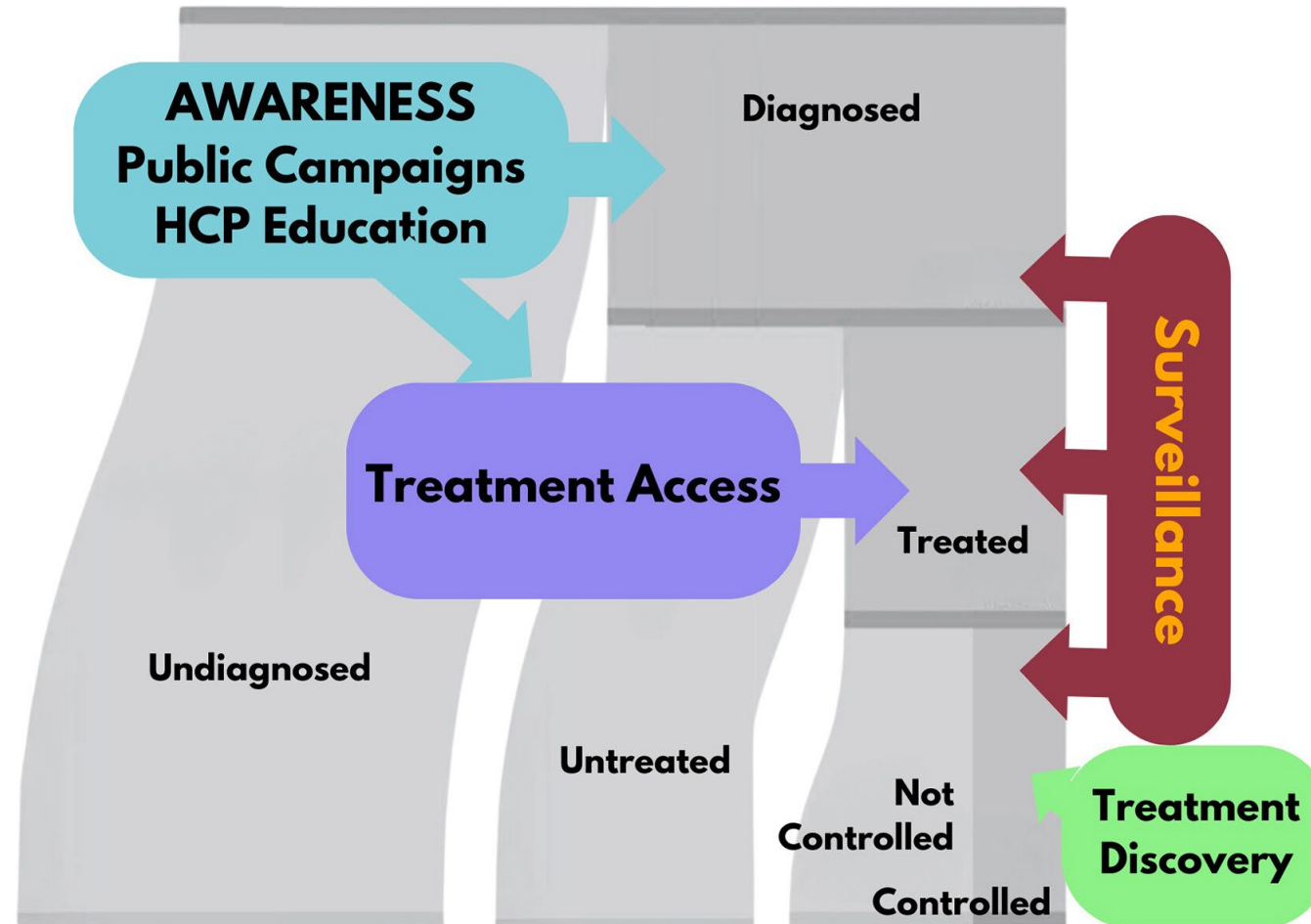
- Goals: universal access, equity, advocacy
- Call for higher global standards



Definition	Days with migraine or moderate-to-severe headache	Quality of life
Migraine Freedom • No days with migraine or moderate-to-severe headache		
Optimal control • ≤ 4 days with migraine or moderate-to-severe headache		
Modest control • 5-6 days with migraine or moderate-to-severe headache		
Insufficient control • > 6 days with migraine or moderate-to-severe headache		

Sacco S, Ashina M, Diener H-C, et al. Setting higher standards for migraine prevention: A position statement of the International Headache Society. *Cephalalgia*. 2025;45(2).

What Can We Learn From Hypertension Campaigns?



American Migraine Foundation Campaign: the Migraine Partnership: Bridging Perspectives



How to Build Trust?
How to Validate Experiences?
Enhance Partnership?
Elicit Lived Experiences?
Discuss Mental Health?



Shared Decision-Making: Values, Goals, Preferences



Telemedicine for evaluation and management of headache disorders



- Most importantly, recent studies have shown that the quality of telemedicine care is not inferior to in-person visits and meets similar standards of patients' satisfaction (Muller 2017).
- Another trial showed that for patients with severe migraine-related disability, telemedicine was feasible and an effective alternative to in-person visits (Friedman 2019).
- Even in the pediatric age groups, telemedicine was perceived as cost-effective, caused less disruption in daily routines, and was more patient-centered (Qubty 2018).
- a clinical trial of patients with MOH, provided evidence that video consultations can be a good alternative (Bekkelund et al. 2019).
- 12week protocols for weekly mindfulness programs to support medication withdrawals for medication overuse headache in Milan, Italy (Grazzi, 2020)

Müller KI et al. Headache patients' satisfaction with telemedicine: a 12-month follow-up randomized non-inferiority trial. *Eur J Neurol*. 2017 Jun;24(6):807-815.

Friedman DI et al. A randomized trial of telemedicine for migraine management. *Cephalalgia*. 2019 Oct;39(12):1577-1585.

Qubty W, Patniyot I, Gelfand A. Telemedicine in a pediatric headache clinic: A prospective survey. *Neurology*. 2018 May 8;90(19):e1702-e1705.

Bekkelund SI et al. Video consultations in medication overuse headache. A randomized controlled trial. *Brain Behav*. 2019 Jul;9(7):e01344.

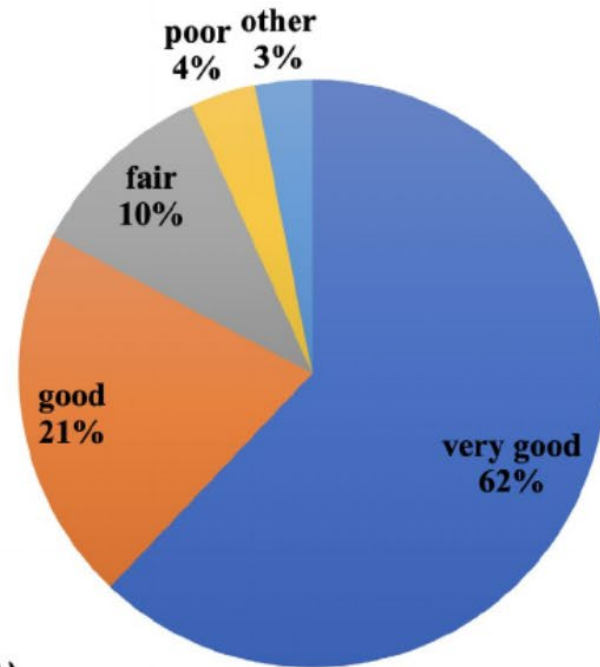
Grazzi L, Rizzoli P. The Adaptation of Management of Chronic Migraine Patients With Medication Overuse to the Suspension of Treatment Protocols During the COVID-19 Pandemic: Lessons From a Tertiary Headache

Center in Milan, Italy. *Headache*. 2020 Jul;60(7):1463-1464.

Telemedicine Patient Satisfaction with Headache Care

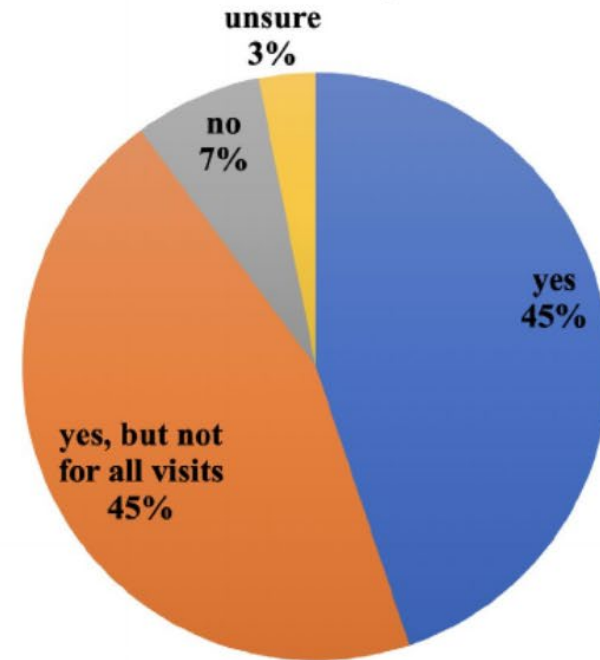


Patient ratings of the telemedicine experience
n= 638



(A)

Patient preferences to continue to use telemedicine for headache care, n= 638



(B)

FIGURE 1 (A) Patient satisfaction/ratings of their telemedicine experience for headache care. (B) Patient preferences to continue to use telemedicine for headache care

Validated Patient-Reported Outcomes



- **Acute Treatment:** (migraine treatment optimization (mTOQ), Migraine-assessment of current therapy (Migraine-ACT), PPMQ-R, FIS, PGIC)
- **Preventive Treatment:** (MIDAS ≥ 11 or HIT-6 > 50), Migraine-Specific Quality of Life questionnaire version 2., Work Productivity and Activity Impairment (WPAI), a general instrument adapted for migraine that evaluates migraine-related disability and costs.
- **Comorbidities**
 - Anxiety: GAD7
 - Depression: PHQ9
 - Sleep Apnea: Stop-Bang Questionnaire
 - PTSD: PCL-C
 - Concussion: SCAT5

Addressing Barriers



- Task-shifting to primary care
- Expanding access to affordable generics
- Community-based models
- Reducing stigma with education
- Local: Provider training, clinic protocols, quality improvement (QI)
- National: Reimbursement, essential medicine access



Advocacy: Clinical and Individual Level



- Address barriers: cost, insurance coverage, transportation
- Help patients navigate assistance programs and community resources
- Advocate for behavioral therapy, telemedicine, and culturally sensitive care
- Normalize inclusion of advocacy in clinical workflow
- Support for workplace/school accommodations
- Reduce stigma through patient empowerment



Conclusion



- Migraine is a public health priority
- Raise standards through advocacy, education, innovation
- Migraine care should be accessible and equitable for all
- Recognize disparities and barriers
- Apply WHO & IHS recommendations
- Evaluate strategies for equity
- Advocate for raising standards



References



- WHO Essential Medicines List (latest edition)
- IHS Practice Recommendations (2023)
- IHS Raising Standards Statement (2024)
- Global Burden of Disease Studies (2019/2021)





THANK YOU

