Presentation MTV20-DP-054

Unmet needs in Migraine Prevention-An Indian Perspective

Scan to download a copy of this presentation

Joy Desai [1], Sneha Thakur [2], Pankaj Gupta [3]

[1] Consultant Neurologist, Jaslok Hospital and Research Centre, Mumbai;
[2] Medical Advisor, Novartis India Limited, Mumbai
[3] Head, Medical Affairs, Novartis India Limited, Mumbai

Migraine Trust Virtual Symposium, 3–9 October, 2020

This literature review is supported by Novartis Pharma India . Erenumab is co-developed by Amgen and Novartis.

No external medical writing support was obtained

Background and Methods

Background:

- Results from community based prevalence studies in India have highlighted that prevalence in India ranges from 22-25% [1,2] which is higher than the global prevalence of 14.2% [3]
- In spite of the high prevalence and burden migraine is under-recognized and undertreated.

Objective:

- This review explores the terrain of unmet needs in migraine and offers possible means to meeting these needs objectively from an Indian perspective

Methods:

- Literature searches were performed using PubMed and Google Scholar. We selected a total of *32 Articles and abstracts* presented at conferences published in 'English' from the period *2002 to Dec 2019.*
- Our search included keywords like burden of migraine, migraine prophylaxis, chronic migraine, episodic migraine, diagnosis, barriers, medication overuse headache, Topiramate, Propranolol, Amitriptyline, Flunarizine, Valproate, patient education, trigger factors, anti-CGRPs, Gepants.

References
1. Sagar M, et al. Assessment of Prevalence of Migraine and Associated Disability in Selected Urban Population of Ludhiana City in Punjab. www.njcmindia.org
2. Girish N. Rao,et al. The burden attributable to headache disorders in India: estimates from a community-based study in Karnataka State. J Headache Pain. 2015; 16: 94
3. Steiner et al. Migraine: the seventh disabler. The Journal of Headache and Pain 2013, 14:1

Results

Results:

1. We included data from 83,068 patients of which 6463 were Indian patients
2. The most common prevalent trigger factor was stress, sleep deprivation and sun exposure [1]
3. Most common reason for discontinuation of existing prophylactic therapy was adverse events and limited efficacy. [2,3]

Figure 1

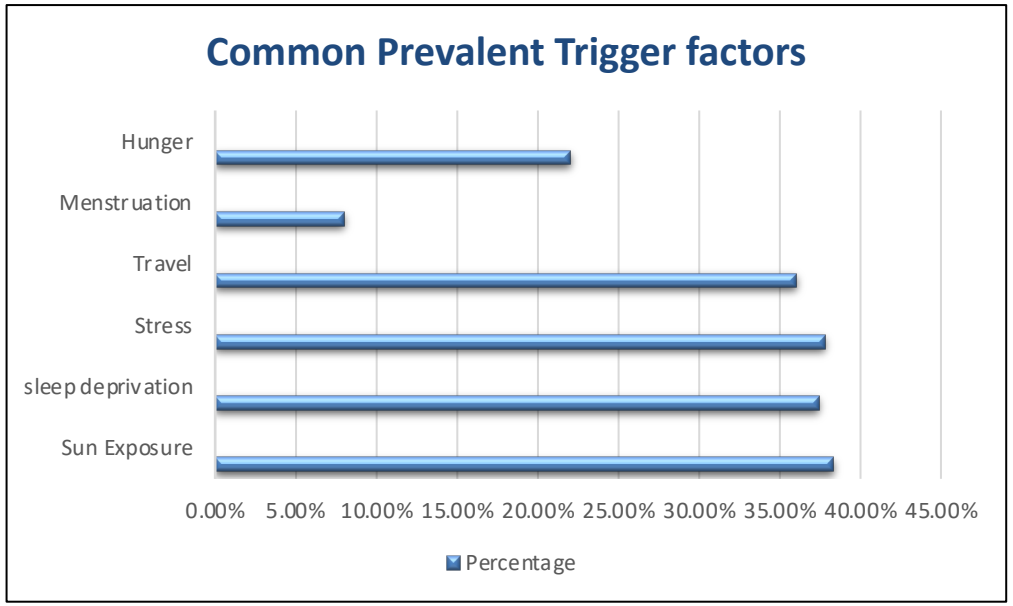
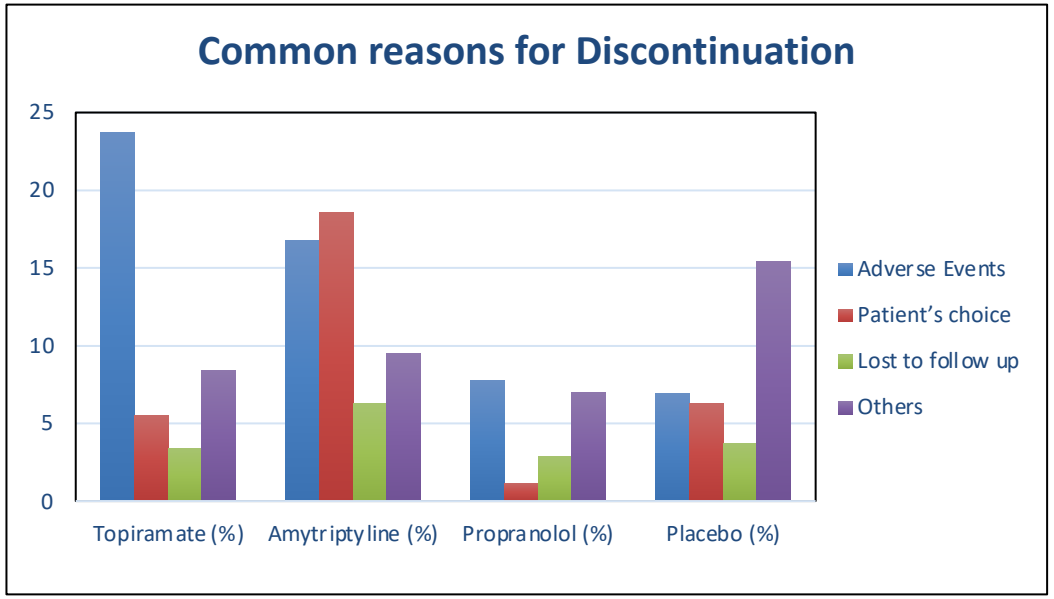


Figure 2



1. . Ramasamy B, Karri M, Venkat S, Andhuvan G. Clinical profile and triggers of migraine: an Indian perspective. Int J Res Med Sci. 2019 Apr; 7(4):1050
2. Hepp Z, Bloudek LM, Varon SF. Systematic review of migraine prophylaxis adherence and persistence. Journal of Managed Care Pharmacy. 2014 Jan;20(1):22-33.
3. .Shukla R, et al. Migraine: Prophylactic Treatment. JAPI

Results and Discussion

1. An analysis of 3666 members of the *Neurological Society of India and the Indian Academy of Neurology* revealed that 30.09% live in the 4 major metropolitan cities, 29.54% in the state capitals, 30.58% in Tier 2 cities, 7.12% in tier 3 cities and 2.67% in rural areas covering a population of 84.59 million.[1] ***This disproportionate distribution of Neurologists leads to accessibility challenge & delay in diagnosis which further mandates approaching a primary care practitioner.***
2. **According to Indian data from 263 patients in My Migraine voice-** Only 32% migraine patients get employer's support and 72% patients reported overall impairment at work.[2]
3. An Indian clinical retrospective study of 1500 patients highlighted certain unusual trigger factors like overcrowding at religious places, stress of educational system, peculiar fasting habits.[3]
4. According Indian Census data 2011, there is a substantial gap of 16% between literacy of females (65.46 %) and that of males (82.14 %) and women's health analysis state that lack of education has significant impact on health.[4,5]

Conclusion

1. Increased focus on migraine education at an undergraduate level is needed to train more primary care practitioners
2. Employers' support plays an important role in effective migraine management.
3. Patient counseling on trigger factors and reasonable expectations from the preventive therapy
4. Prioritize women's health and education to manage a disease like migraine which has female predilection
5. Standardization of migraine management goals across the globe

Limitations- The review is not a systematic review, so has inherent limitations of the narrative review including subjective bias regarding selected studies, analysis and conclusions. This review does not provide a critical appraisal of all the methodologies in existing literature and conclusions pertaining to the above stated points. Further work in this regard is needed.

References

1. Ganapathy K. Distribution of neurologists and neurosurgeons in India and its relevance to the adoption of telemedicine. Neurology India. 2015 Mar 1;63(2):142.
2. Abstracts at IANCON, October 2019. Available at http://www.annalsofian.org/ Last accessed on September 2020.
3. .Ravishankar K, Chakravarty A. Headache-The Indian Experience. Ann. Indian Acad. Neurol. 2002. Vol.5: 107-112.
4. Singh, Ripudaman. (2016). Female Literacy and Economic Development in India. Rupkatha Journal on Interdisciplinary Studies in Humanities. 8. 64-70. 10.21659/rupkatha.v8n2.07.
5. Kamalapur SM, Reddy S. Women health in India: An analysis. Int. Res. J. Social Sci. 2013 Oct;2(10):11-5.