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Migraine-related healthcare resource use and costs associated with migraine chronification: a panel-based chart review

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Introduction:

This retrospective, panel-based chart review assessed migraine-related healthcare resource use (HRU) and costs associated with migraine chronification for patients with four or more monthly migraine days (4+ MMDs) in France, Germany, Italy, and Spain.

Methods:

Eligible physicians extracted data for adults with 4+ MMDs who initiated ≥ 1 preventive treatment on or after 1/1/2013, and received physician care for ≥ 6 months after the date of the most recent preventive treatment initiation (index date). Migraine-related HRU and costs (2017 €) during the 6-month post-index period were compared between patients with improved versus stable/worsened migraine. Classification was based on the trajectory of migraine severity from the 1-month pre-index period to the post-index period as improved (converting from chronic to episodic or from chronic/episodic to < 4 MMDs) or stable/worsened migraine (remaining chronic/episodic or transforming from episodic to chronic).

Results:

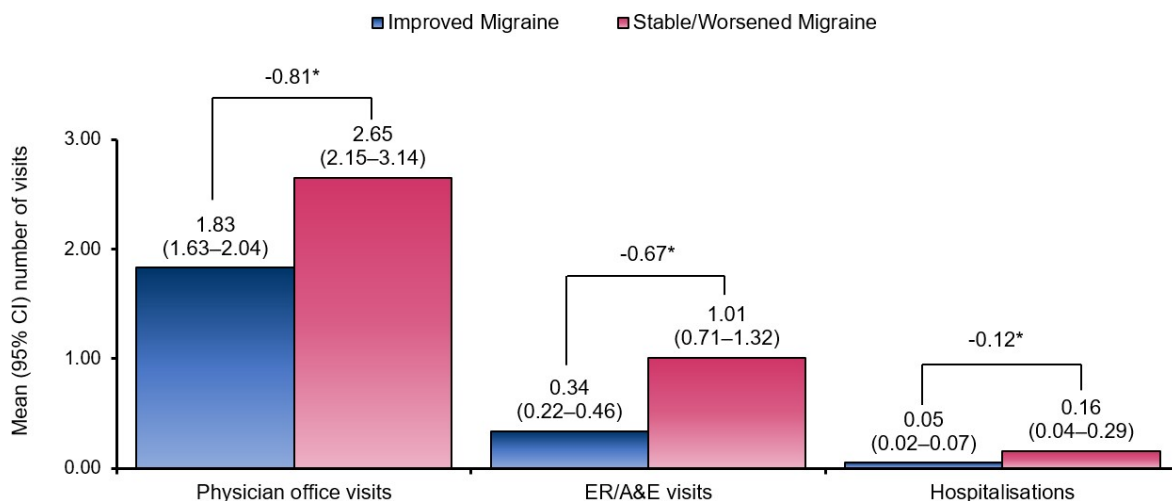
Overall, 470 patient charts (339 improved migraine; 131 stable/worsened migraine) were analysed; mean age was 37 years and 65.7% were female. After adjusting for within-physician correlation, country, sex, and presence of comorbidities, patients with improved migraine had significantly fewer physician office visits (-0.81; $p < 0.001$), emergency room/accident & emergency visits (-0.67; $p < 0.001$), and hospitalisations (-0.12; $p < 0.001$) compared to patients with stable/worsened migraine (**Figure 1**).

Similarly, costs for physician office visits, hospitalisations, and total costs were significantly lower for patients with improved versus stable/worsened migraine (**Figure 2**).

Conclusion:

Over a 6-month period following the initiation of preventive migraine treatment, patients with improved migraine had significantly fewer migraine-related HRU and lower costs than those with stable/worsened migraine.

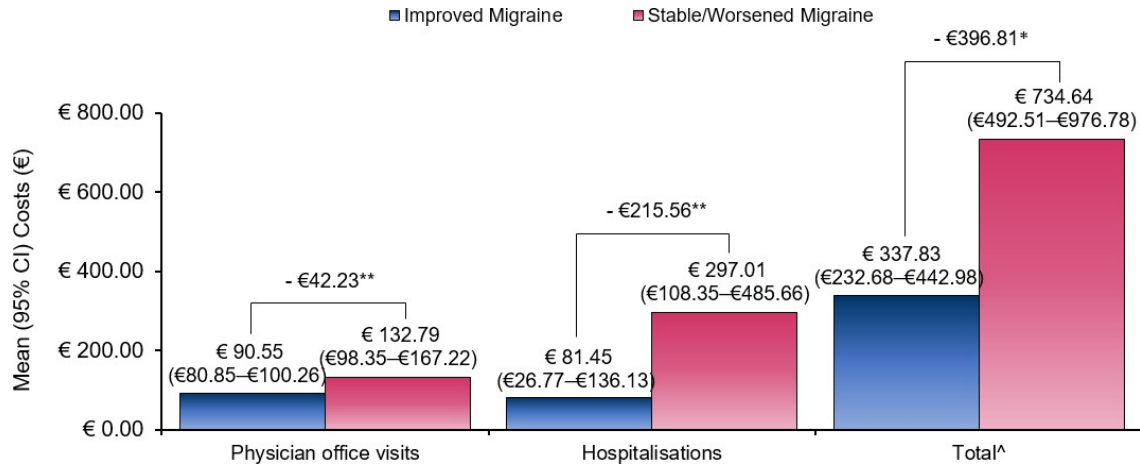
Figure 1: Migraine-related healthcare resource use among patients with improved versus stable/worsened migraine (after adjusting for within-physician correlation, country, sex, and presence of comorbidities before the index date)



CI, Confidence interval, ER/A&E, Emergency room/accident & emergency; HRU, healthcare resource use

* $p < 0.001$

Figure 2: Migraine-related costs among patients with improved versus stable/worsened migraine (after adjusting for within-physician correlation, country, sex, and presence of comorbidities before the index date)



CI, Confidence interval

*p<0.01; **p<0.05

[^]Total costs included costs for outpatient visits, emergency room/accident & emergency visits, hospitalisations, nurse practitioner, psychologist, psychiatrist, physiotherapy, or other specialist visits, cranial computerised tomography scans, cranial and cranio-cervical magnetic resonance imaging scans, blood tests, nerve stimulator procedures, occipital nerve block procedures, electroencephalograms, and electrocardiograms. However, these costs reflect a conservative estimate. If a physician selected “unknown/not sure” for any healthcare resource item, 0 EUR was assumed. If healthcare resource unit costs were not available, costs were not included.