

Demographics, Clinical Characteristics, Healthcare Provider Visits and Care Seeking Behavior Data from the European Observational Survey of the Epidemiology, Treatment and Care of Migraine: OVERCOME (EU)

Julio Pascual¹, Tommaso Panni², Hans-Peter Hundemer², Diego Novick², Tamás Treuer², Grazia Dell’Agnello² and Stefan Evers³

¹Hospital Universitario Marqués de Valdecilla, Santander, Spain, ²Eli Lilly and Company, Indianapolis, USA, ³University of Münster, Münster, Germany

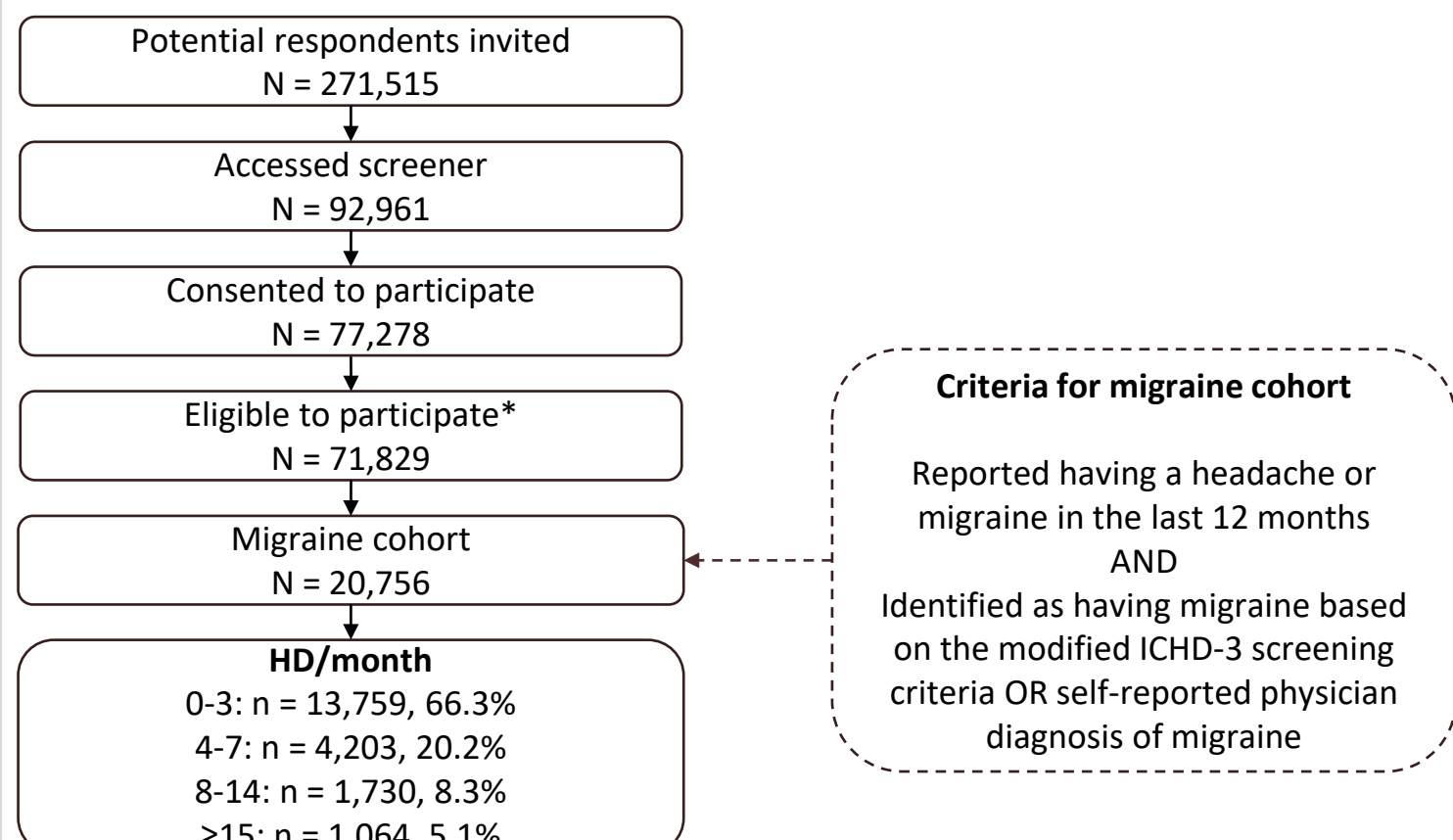
BACKGROUND AND OBJECTIVE

- Migraine is a debilitating neurological disease with an estimated overall prevalence of 15% in Europe¹
- With new preventive migraine medications in the market, and anticipated approval of new acute treatments, it is important to understand the epidemiology and burden of migraine, identify barriers to the initiation of preventive and acute therapies in migraine, and understand how the introduction of new classes of migraine medication influences healthcare delivery and migraine care, as well as to understand perceptions/attitudes about people with migraine
- The **Observational survey of the Epidemiology, Treatment and Care Of Migraine Europe [OVERCOME (EU)]** is part of an overarching study program that also includes the US and Japan

The **objective** of this analysis is to describe the demographics, clinical characteristics, and care seeking behaviors of people with migraine in Europe

STUDY DESIGN

- OVERCOME (EU)** is a cross-sectional, population-based, web-based survey
- Enrollment and data collection period: Oct 2020 – Feb 2021
- Countries included: Spain and Germany



*Eligibility refers to parameters for a representative study sample per country, using screener quotas based on age and sex. HD = Headache Days; N/n = Number of individuals.

DEMOGRAPHICS AND COMORBIDITIES

	HD/month				Total N=20,756
	0-3 N=13,759	4-7 N=4,203	8-14 N=1,730	≥15 N=1,064	
Mean age, years	40.1	40.7	41.2	42.2	40.4
Mean age at diagnosis, years*	24.0	24.4	25.1	24.3	24.2
Female, %	57.0	64.6	68.0	72.6	60.3
Previously diagnosed with migraine by healthcare provider, %	52.8	66.7	67.6	66.3	57.6
Most frequently reported health conditions (≥20% in total group), %:					
Allergies / hayfever	37.5	41.0	41.4	41.5	38.8
Anxiety	23.7	28.6	33.0	37.4	26.2
High cholesterol / lipids	23.4	25.5	29.0	31.2	24.7
Depression	20.3	27.3	34.2	42.3	24.0
Hypertension	22.1	23.9	28.7	32.0	23.5

Colour gradient corresponding to percentages shown

*n = 5,710, 2,245, 938, and 575 for 0-3, 4-7, 8-14, and ≥15 HD/month, respectively and n = 9,468 for Total. Health conditions other than migraine, that a healthcare provider told the individual they had, reported by at least 20% of the respondents in the total group are shown. HD = Headache Days; N/n = Number of individuals.

CONCLUSIONS

- Accompanying symptoms and comorbidities were reported by high proportions of individuals and their rates generally increased with increasing HD/month
- On average per individual, more than 50% of healthcare provider visits in the prior 12 months were migraine/severe headache-related
- Among the individuals who visited a specialist and among those who needed emergency care at least once in the prior 12 months for migraine or severe headaches, approximately 40% in each group had severe disability (MIDAS IV)

Study Strengths

- General population-based assessment (not limited to clinic or niche migraine populations)
- Data collected as novel preventive therapeutics entering market

Study Limitation

- Survey data are self-reported and are susceptible to recall, misinterpretation, and prioritization biases

CHARACTERISTICS OF MIGRAINE OR SEVERE HEADACHE

Symptoms, pain severity, and duration of migraine or severe headache

Most frequently reported symptoms* (≥70% in total group), %:	HD/month				Total
	0-3	4-7	8-14	≥15	
Pain has moderate or severe intensity	90.4	94.6	96.0	96.1	92.0
Sound is bothersome	82.0	86.6	87.0	87.9	83.7
Pain is pounding, pulsating or throbbing	81.0	87.5	87.0	85.8	83.1
Light is bothersome	80.0	84.0	84.3	84.9	81.4
Pain worse on just one side	73.6	81.6	84.2	85.9	76.7
Pain is made worse by routine activities such as walking or climbing stairs	70.4	76.6	76.2	76.8	72.5

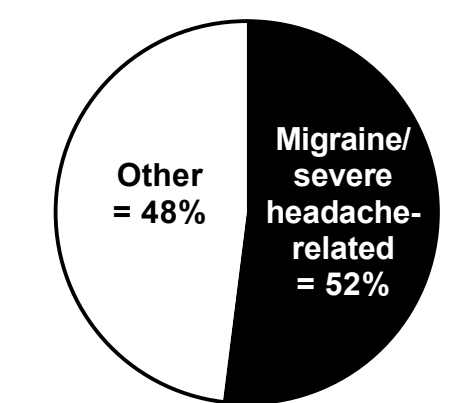
Mean pain severity* score in total group = 6.19

Duration of a migraine or severe headache, % of total group	
Less than 2 hours	11.2
2-3 hours	26.6
4-7 hours	27.2
8-11 hours	10.9
12-23 hours	8.7
24-47 hours	8.9
48-71 hours	4.4
≥72 hours	2.1

Questions regarding symptoms, pain severity score, and duration of a migraine or severe headache were asked to all respondents in the migraine cohort. *Percentages shown represent those who answered with 'less than half the time or more', with the remainder of respondents having answered 'never or rarely'. *See 'Survey Instruments, References, and Declarations' section for further information. HD = Headache Days.

HEALTHCARE PROVIDER VISITS AND CARE-SEEKING BEHAVIOR

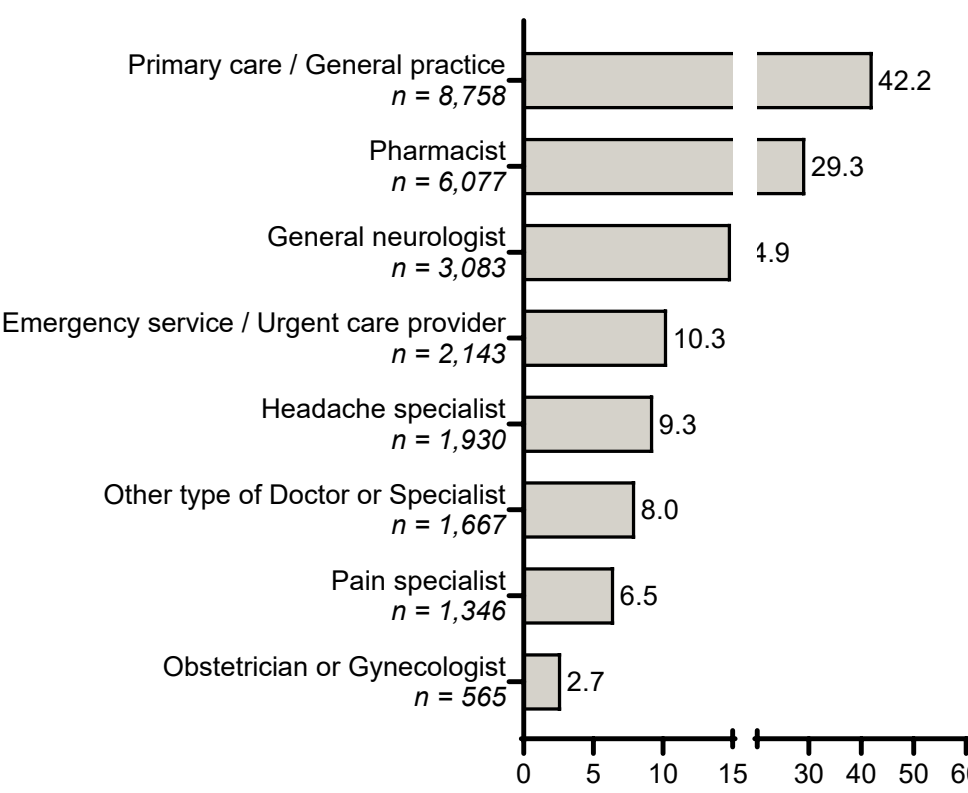
Ratio of migraine/severe headache-related to total number of visits



Mean ratio of migraine/severe headache-related to total number of healthcare provider visits in the prior 12 months, per individual

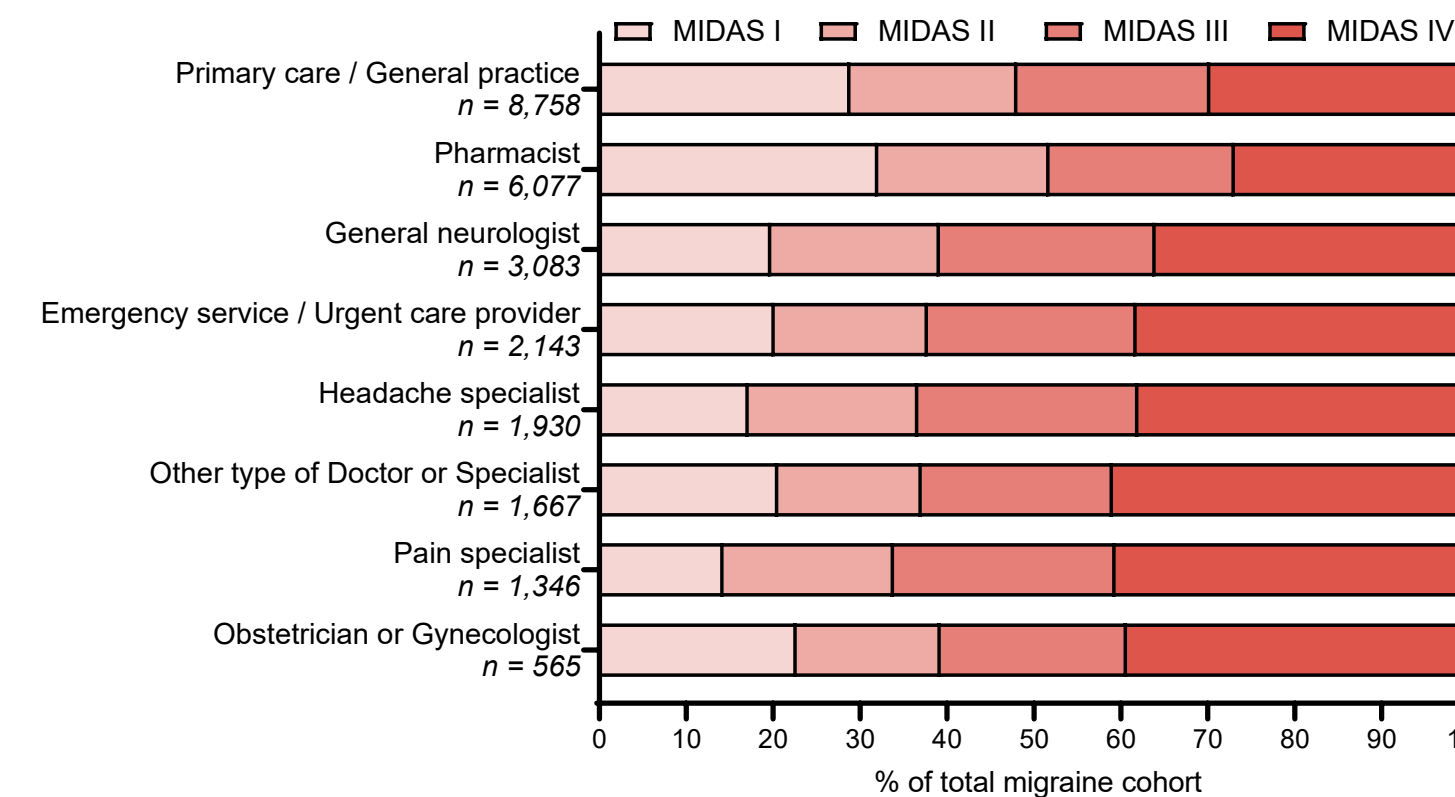
Respondents in the migraine cohort who had visited a healthcare provider in the prior 12 months for any reason were subsequently questioned regarding visits to the same healthcare provider(s) in the prior 12 months for migraine or severe headaches specifically. n = Number of individuals.

Healthcare providers visited at least once in the prior 12 months for migraine or severe headaches



LEVEL OF DISABILITY IN INDIVIDUALS, PER HEALTHCARE PROVIDERS VISITED

Distribution of MIDAS# categories per healthcare providers visited at least once in the prior 12 months for migraine or severe headaches



Respondents in the migraine cohort who had visited a healthcare provider in the prior 12 months for any reason were subsequently questioned regarding visits to the same healthcare provider(s) in the prior 12 months for migraine or severe headaches specifically. All respondents in the migraine cohort were asked to complete the MIDAS. MIDAS I = little or no disability; MIDAS II = mild disability; MIDAS III = moderate disability; MIDAS IV = severe disability. *See 'Survey Instruments, References, and Declarations' section for further information. MIDAS = Migraine Disability Assessment; n = Number of individuals.

SURVEY INSTRUMENTS, REFERENCES, AND DECLARATIONS

Survey Instruments
MIDAS measures headache-related disability based on five disability questions on the number of missed days, in the prior 3 months, due to headache in school or paid work, household work, and family, social, or leisure activities as well as the number of additional days with significant limitations to activity in the domains of employment and household work. The MIDAS score is derived as the sum of the lost days due to headache recorded for these questions and the sum score categories are little or no (0-5), mild (6-10), moderate (11-20), and severe (≥21). Two additional questions, that are not scored in the MIDAS Questionnaire, collect information on the frequency of headaches and the intensity of the headache pain (pain severity).²

References
1. Stovner LJ, Andree C. *J Headache Pain*. 2010;11(4):289-99. 2. Stewart WF, et al. *Neurology*. 2001;56(6 Suppl 1):S20-8.

Disclosures
TP, HPH, DN, TT, and GDA are full-time employees and, except for TP, shareholders of Eli Lilly and Company. JP reports: serving on advisory boards for Allergan-Abbvie, Amgen-Novartis, Lilly, and TEVA; serving as speaker / on speaker boards for Allergan-Abbvie, Amgen-Novartis, Lilly, and TEVA; grant support for research or education from Allergan and Lilly; and serving on the editorial board for Headache. SE reports: serving on advisory boards for Allergan, Lilly, Lundbeck, Novartis, and Teva; serving as speaker / on speaker boards for Lilly, Lundbeck, Novartis, and Teva; and serving as a consultant for Lilly, Novartis, and Teva.

Acknowledgments
The authors wish to thank Sarah Roche, an employee of Eli Lilly and Company, for writing and editorial support.

Scan the QR code or visit - <https://lillyscience.lilly.com/congress/ihc2021> for a list of all Lilly content presented at the congress

Other company and product names are trademarks of their respective owners.

