HEALTHCARE RESOURCE USE IN HEADACHE SPECIALIZED CENTERS TO MANAGE MIGRAINE PORTUGUESE PATIENTS WHO HAVE FAILED PREVIOUS PROPHYLACTIC TREATMENTS

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Background

- Migraine is a **common neurological disorder**: prevalence of **20.6%** in Portugal[1]
- Migraine is the **4th** leading cause of **disability** in Portugal[2]
- Literature suggests that people with migraine have **increased healthcare resource use** particularly the difficult-to-treat patients[2]
- Evidence about migraine-related **healthcare resource use is scarce** in Portugal

References: 1. Global Burden of Disease. Available at https://gbd2016.healthdata.org; 2. Portugal: The Nation´s Health 1990-2016; 3. Silberstein et al. Health care Resource Utilization and Migraine Disability Along the Migraine Continuum Among Patients Treated for Migraine. Headache. 2018 Nov;58(10):1579-1592.

Research questions

- What healthcare resources are used to manage migraine difficult-to-treat patients in Portugal?
- Does healthcare resource use increases with number of previous prophylactic treatment failures?
- Are there any diferences in HCRU between patients recruited in private versus public hospitals?

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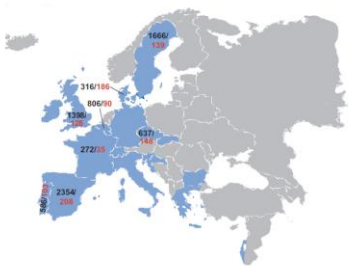
Methods

- **BECOME* study**: **B**urden of migrain**E** in specialized headache **C**entres treating patients with pr**O**phylactic treat**M**ent failur**E**.
- **Design:** Observational, descriptive, cross-sectional study conducted across 17 European countries/Israel (Nov2017-Aug2018)
- **Participants**:
  - Age 18-65 years
  - Attending headache specialized centers
  - Migraine diagnosis (ICHD-3)
  - ≥4 monthly migraine days
  - Evidence of ≥1 prophylactic treatment failure over last 5 years
- **Portuguese sample**
- **6 headache specialized centres (3 public/3 private)**

Participating countries



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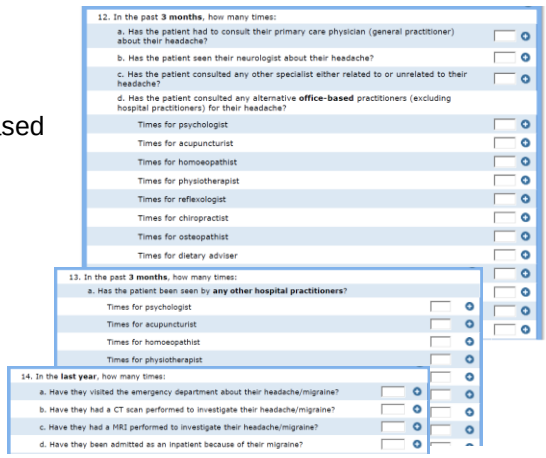
Methods

- **Self-reported HCRU**
  - Hospitalization
  - Emergency room
  - Neurology visits
  - GP visits
  - Hospital and office-based non-medical visits
  - Imaging
  - Current treatments
- **Annualized HCRU**
- **Descriptive analysis**



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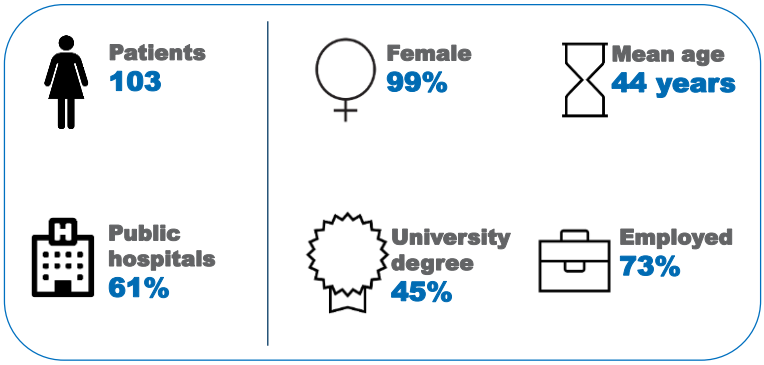
Results

Characteristics



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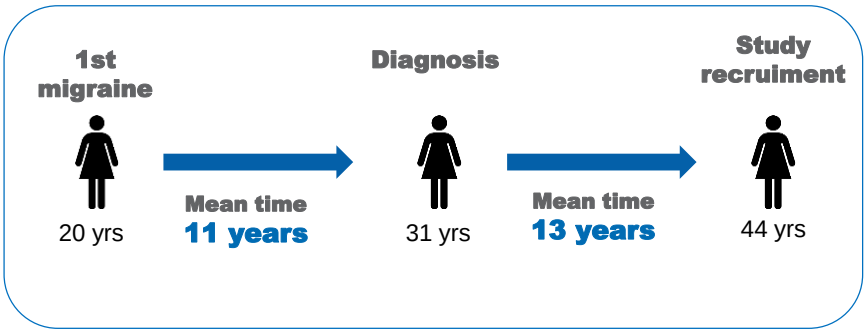
Results

Time to diagnosis and duration of disease



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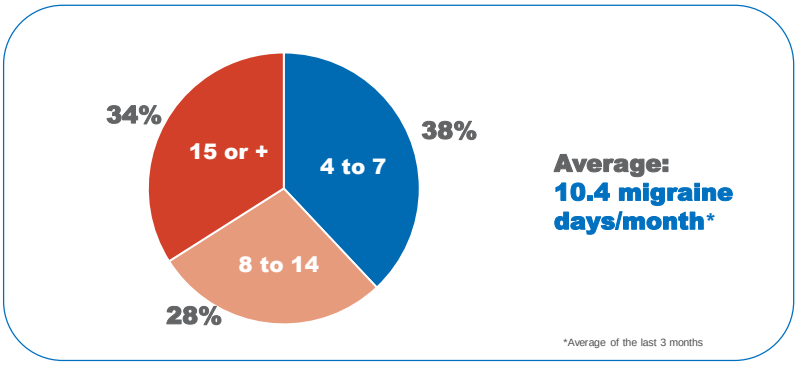
Results

Monthly migraine days



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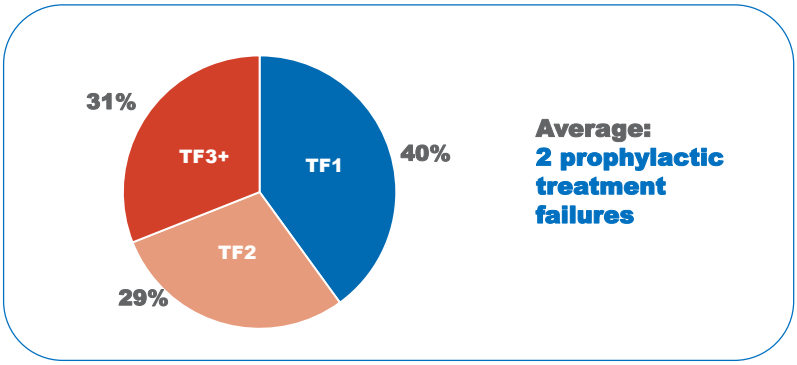
Results

Prophylactic treatment failures



TF, prophylactic treatment failure

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Results

Visits/year

% of patients	Mean/user[b]	Mean/patient
100% to neurology visits	**3.5** visits	**3.5** visits
16% went to GP	**5.5** visits	**0.9** visits
7% to hospital non-medical visits*	**27** visits	**2** visits
11% to office-based non-medical visits*	**20** visits	**2** visits

GP, General Practitioner

*Psychology, physiotherapy, nutrition, nurse, acupuncture and osteopathy.

[b]Annualized based on the answer to "In the past 3 months, ..."

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Results

ER and hospitalization/year

% of patients	Mean/user	Mean/patient
37% were admitted at ER	**3** times	**1** visit
3% were hospitalized	**2** times	**0.06** hosp

ER, emergency room

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Results

Exams/year

% of patients	Mean/user	Mean/patient
11% performed MRI	**1** time	**0.1** MRI
25% performed CT scan	**1.4** times	**0.4** CT

MRI, magnetic resonance imaging; CT, computerized tomography

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Results

Current treatments

% of patient	Mean/patient	
87% acute treatment	**1.7** drugs	**70%** analgesics **50%** triptans
67% prophylactic treatment	**1.6** drugs	**29%** antidepressants **29%** antiepileptics **25%** betablockers **9%** botulinum toxin

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Results

Healthcare resource use by number of prophylactic treatment failures

Mean/patient/year	TF1 (n=41)	TF2+ (n=62)	TF3+ (n=32)	TF1 vs TF3+
Hospitalization	0.0	0.1	0.2	↗
Emergency	1.0	1.1	1.4	↗
Neurology visits	2.6	4.1	5.9	↗
Hospital non-medical visits	2.1	1.6	3.1	↗
Office-based non-medical visits	0.2	0.8	1.6	↗
GP visits	1.1	0.7	0.4	↘
MRI	0.5	0.2	0.3	↘
CT scan	0.1	0.1	0.1	=

*Psychology, physiotherapy, nutrition, nurse, acupuncture and osteopathy.
GP, general practitioner; MRI, magnetic resonance imaging; CT, computerized tomography; TF, treatment failure

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Results

Healthcare resource use by type of hospital

Mean/participant/year	Public hospitals (n=63)	Private hospitals (n=40)	Public vs private
Hospitalization	0.0	0.2	↗
Emergency	1.0	1.2	↗
Neurologist visits	3.1	4.1	↗
Hospital non-medical visits*	1.1	2.9	↗
Office-based non-medical visits*	0.2	1.2	↗
GP visit	0.9	0.8	↘
MRI	0.1	0.1	=
CT scan	0.3	0.3	=

*Psychology, physiotherapy, nutrition, nurse, acupuncture and osteopathy.
GP, general practitioner; MRI, magnetic resonance imaging; CT, computerized tomography

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Conclusions

- Healthcare resource use related with migraine in difficult-to-treat patients in Portugal will be usefull in to conduct economic analyses
- Healthcare resource use due to migraine seems to increase with number of prophylactic treatment failures ► higher healthcare need in more difficult-to-treat patients
- Resource use except imaging and GP visits seems slightly higher in participants recruited in private hospitals vs public hospitals ► analyses should be performed to understand populations are homogeneous
- Study limitations include self-reported HCRU (recall bias) and limited sample size to perform inference around subgroup and multivariate analyses

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Acknowledgments

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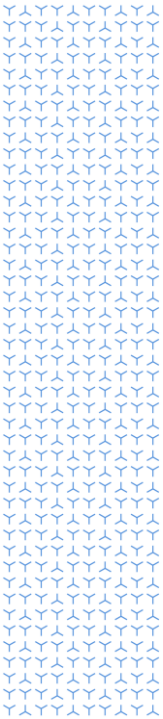

Thank you

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