# The Italian chROnic migraiNe (IRON) Registry: a report from the first 340 patients

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### Objective:

The Italian Chronic Migraine Registry (IRON) registry, established under the auspices of the National Institute of Health, is aimed tofavor customized healthcare, tailored therapy and proper economic resources allocation.

# **Background:**

Chronic migraine (CM) requires increased disease awareness, improved adherence to diagnostic and therapeutic guidelinesand a rational healthcare resource use.

## Design/Methods:

We enrolled all consecutive CM patients seen at 28 Italian headache centers since 1/3/2018. Detailed patients' information on life-style, socio-demographic factors, migraine featuresbefore and after chronicization, comorbidities and healthcare resource use was gathered by specifically-trained neurologists with face-to-face interviews (406 items)using a specific, shared, web-based software. The protocol was approved by local IRBs and all patients gave their informed consent.

#### Results:

Three hundred and forty CM patients were enrolled until 01/10/2018 (F/M: 274/66; age  $46\pm13.1$  yrs; positive CM family history 19.4%; headache days/month  $28\pm16.8$ ; medication overuse: 46.5%). Allodynia occurred in 50.9% of subjects. Symptoms of peripheral trigeminal sensitization were common: headache was frequently unilateral (46.1%), pulsating (54.1%) associated with moderate/severe vegetative symptoms (68.8%), and unilateral cranial autonomic symptoms (25.3%). Most of patients (73.5%) underwent >2.1 investigations, frequently inappropriate (22.1%) and mostly (55%) loaded on the national health system. During the previous year, 16.5% of patients had been admitted to the emergency department (mean admissions n=1.9). Univariate analysis revealed that patients with  $\ge 25$  headache days/month (CM+) had more frequently bilateral headache (p=0.007), high MIDAS score (p=0.03), hypertension, urological and mandibular comorbidities (p=0.05), hospital admissions (p=0.01), lower therapeutic compliance (p=0.05) and inappropriate headache diary filling (p=0.01). Before chronicization, CM+ had longer migraine attacks (p=0.02) and preferentially used analgesic combinations (p=0.028).

### **Conclusions:**

The IRON registry, the first CM registry worldwide, could allow to disentangle CM endophenotypes, improving management, treatment, and economic resource allocation, ultimately reducing the burden on both patients and health system.