



Migraine

Epidemiology and burden

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Migraine epidemiology

- In 2017, it was estimated that 1.3 billion people worldwide suffered from migraines.¹
- According to the WHO's Global Burden of Disease study, "headache disorders" are consistently the second most prevalent disease worldwide.¹
- Migraine is almost three times as common in women than in men.²
- Migraine is the most prevalent cause of disability among those under 50 years old.³
- High levels of disability and comorbidity, such as an elevated risk of anxiety, depression, and insomnia, are associated with migraine.⁴

Migraine is a highly prevalent and burdensome condition

WHO=World Health Organization

1. GBD 2017 Disease and Injury Incidence and Prevalence Collaborators. Lancet 2018;392(10159):1789–1858;

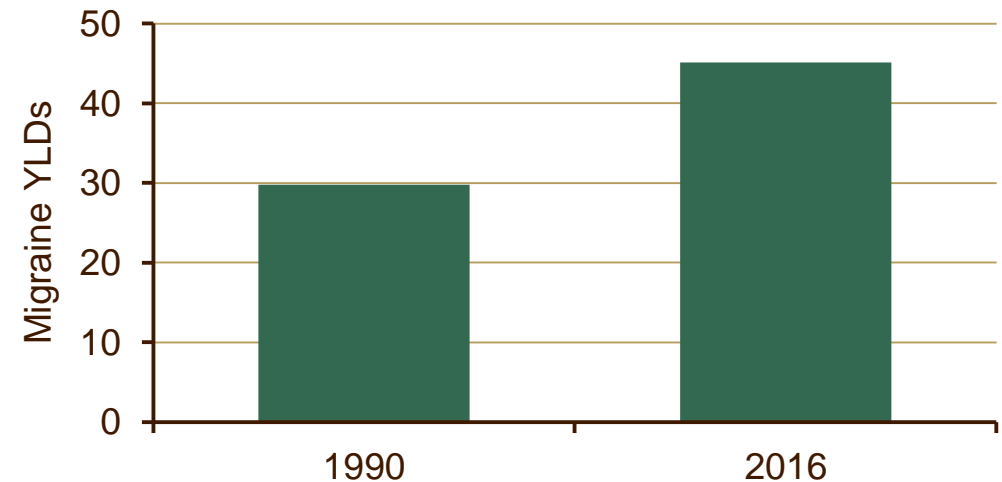
2. Gasparini et al. Curr Genomics 2013;14(5):300–315; 3. Steiner et al. J Headache Pain 2018;19(1):17; 4. Buse et al. J Headache Pain 2020;21(1):23

Prevalence of migraine

Migraine and headache in the WHO GBD study

- In 2017, it was estimated that 1.3 billion people worldwide suffered from migraines.¹
- In a detailed, migraine-focused analysis of the GBD 2016 study, the global age-standardized prevalence of migraine was **14.4%** (18.9% for women, and 9.8% for men)²
- In the same analysis, the global age-standardized prevalence of tension-type headache was **26.1%** (30.8% for women, and 21.4% for men)²

- The estimated years lived with disability (YLDs) associated with migraine increased by 51.2%, from 29.8 million to 45.1 million, between 1990 and 2016.²



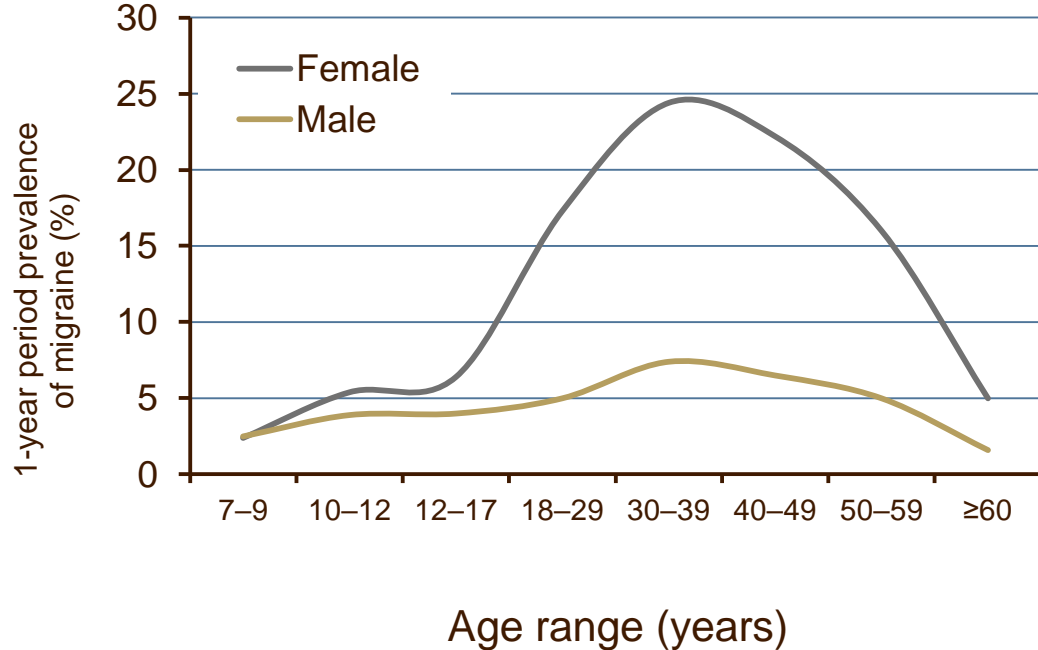
GBD=Global Burden of Disease; WHO=World Health Organization; YLD=years lived with disability

1. GBD 2017 Disease and Injury Incidence and Prevalence Collaborators. Lancet 2018;392:1789–1858;

2. GBD 2016 Headache Collaborators. Lancet Neurol 2018;17(11):954–976

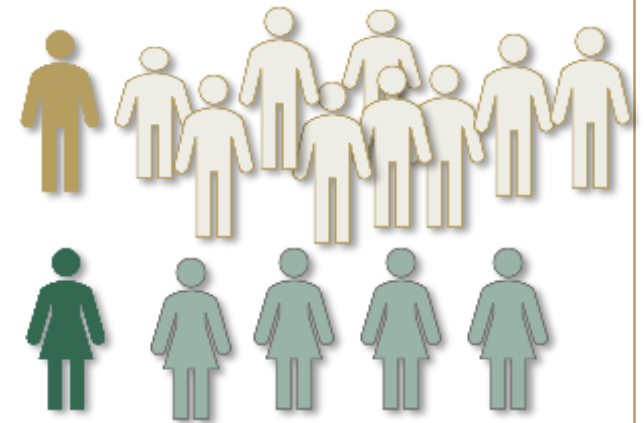
Prevalence of migraine by age and sex

Prevalence of migraine¹



- The prevalence of migraine attacks often rises with age, reaching a peak between the ages of 30-40 years.¹⁻³
- Migraine is more common among women than among men¹⁻⁶

Migraine is the most common cause of recurrent headaches, and is said to be experienced at some point by and **1 in 10 men**, and **1 in 5 women**⁵



Migraine as a global health crisis – the top cause of disability in the under 50s¹



Globally, migraines have a negative impact on public health and are a major cause of disability in both high- and low-income countries.^{1,4}

An estimated **68.5 million individuals** were affected by migraine in the USA in 2017^{2,3}

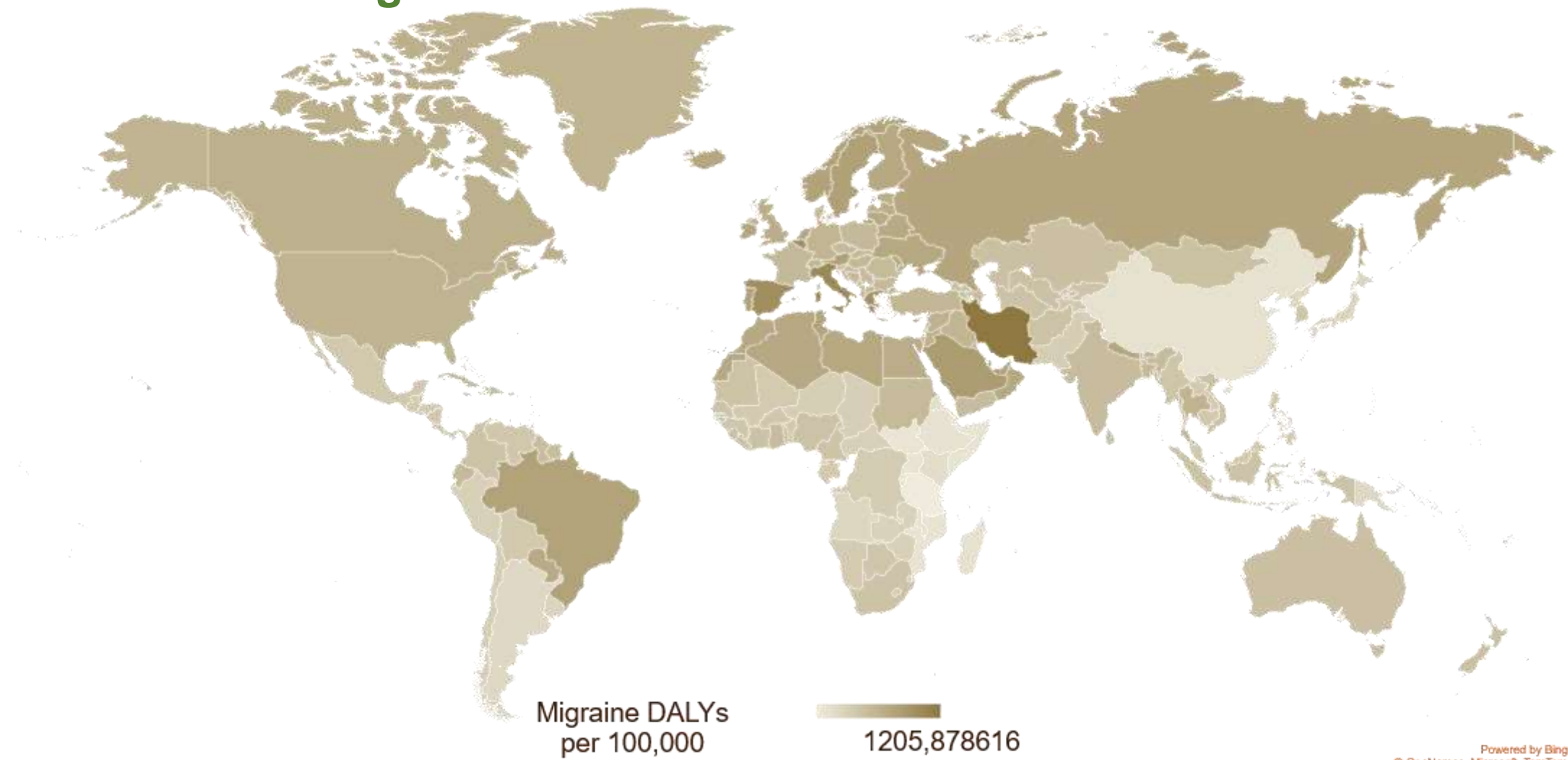


Among people aged <50 years old, migraine is the **most common neurological disorder**¹

GBD=Global Burden of Disease; USA=United States of America; WHO=World Health Organization

1. Steiner et al. J Headache Pain 2018;19(1):17; 2. GBD 2017 Disease and Injury Incidence and Prevalence Collaborators. Lancet 2018;392:1789–1858; 3. IHME. <http://ghdx.healthdata.org/gbd-results-tool>. Accessed Jun 2020; 4. GBD 2016 Headache Collaborators. Lancet Neurol 2018;17(11):954–976; 5. GBD 2016 Disease and Injury Incidence and Prevalence Collaborators. Lancet 2017;390(10100):1211–1259

Global burden of migraine

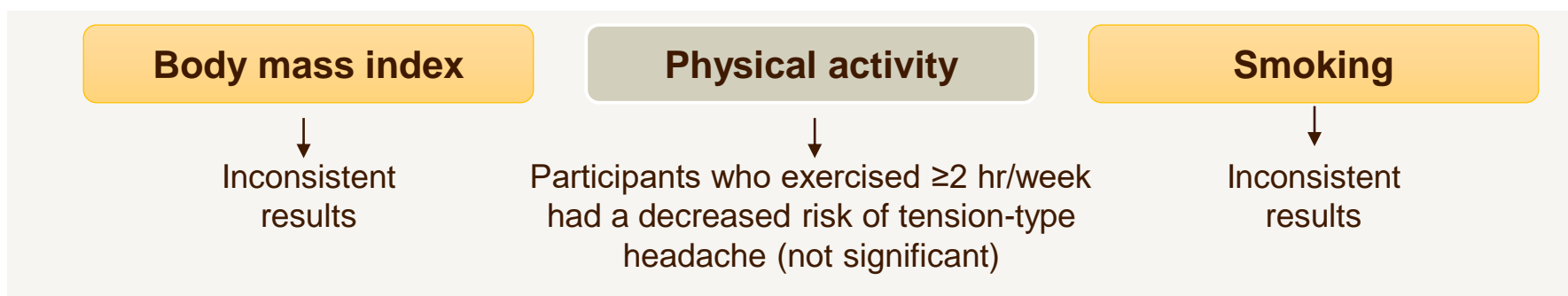


<https://vizhub.healthdata.org/gbd-compare/>
Global Burden of Disease Collaborative Network, Global Burden of Disease Study 2017 (GBD 2017) Results,
Seattle, United States: Institute for Health Metrics and Evaluation (IHME), 2018, Available from <http://ghdx.healthdata.org/gbd-results-tool>

Risk factors for the onset of migraine

Lifestyle factors and migraine risk

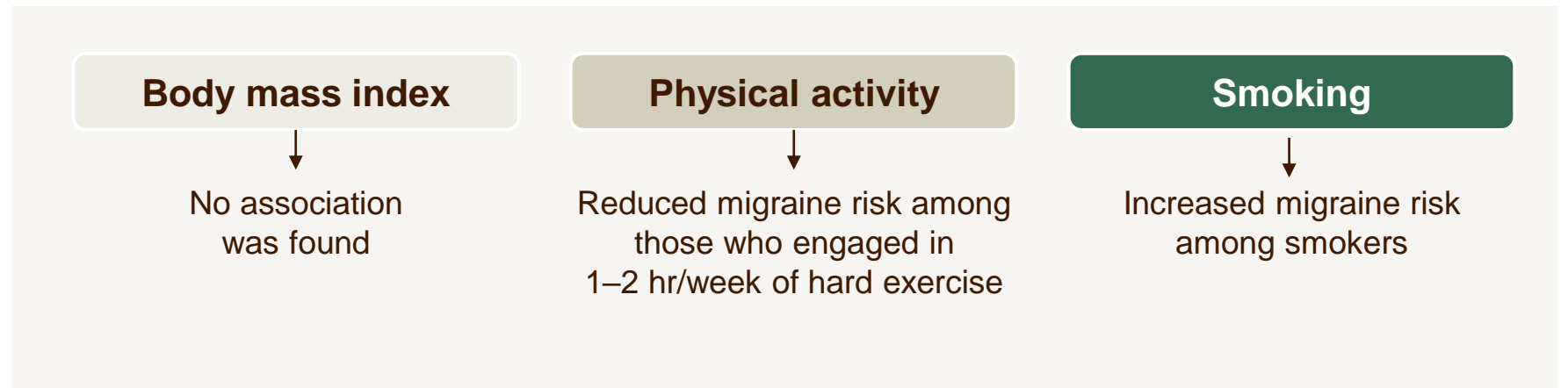
- The German DMKG study used data from 7,417 participants to analyze the effect of 3 lifestyle factors on headache and migraine risk:¹



DMKG=German Migraine and Headache Society; HUNT=Nord-Trøndelag Health Surveys; OR=odds ratio; RR=risk ratio

1. Winter et al. J Headache Pain 2011;12:147–155; 2. Hagen et al. Cephalalgia 2018;38(13):1919–1926

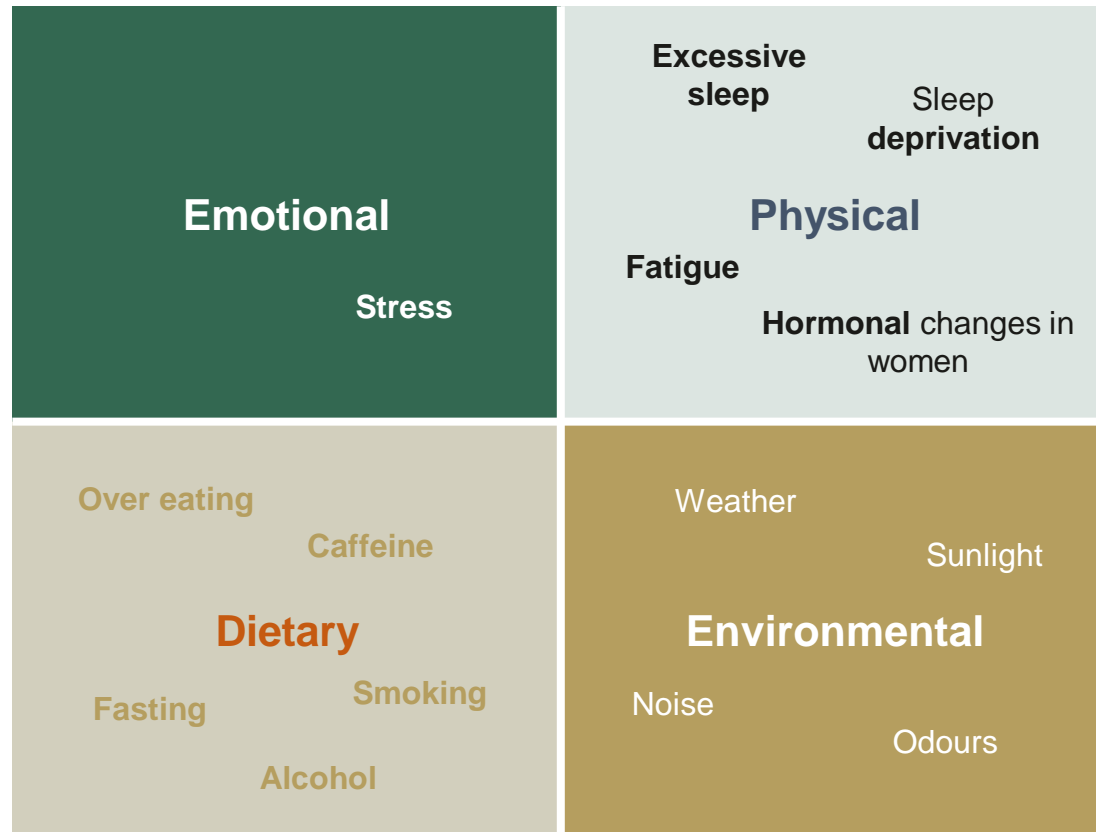
- The HUNT study evaluated the effect of these same lifestyle factors at baseline on the risk of headache 11 years later in 15,276 participants without headache at baseline:²



Migraine attack triggers

Migraine attack triggers

– some trigger factors relate to changes in those conditions¹⁻⁴



1. Turner et al. Headache 2019;59(4):495–508; 2. Wöber et al. J Headache Pain 2006;7(4):188–195; 3. Pavlovic et al. Headache 2014;54(10):1670–1679; 4. Sarchielli. J Headache Pain 2006;7:172–173; 5. Hoffmann & Recober. Curr Pain Headache Rep 2013;17(10):370; 6. Lipton et al. Headache 2014;54(10):1661–1669; 7. Onderwater et al. Eur J Neurol 2019;26(4):588–595; 8. Hagen et al. Cephalalgia 2018;38(13):1919–1926

Thank you 😊