

Headache disorders

Fact

sheet

Updated April 2016

Key facts

- Headache disorders are among the most common disorders of the nervous system.
 - It has been estimated that almost half of the adult population have had a headache at least once within the last year.
 - Headache disorders, which are characterized by recurrent headache, are associated with personal and societal burdens of pain, disability, damaged quality of life, and financial cost.
 - Worldwide, a minority of people with headache disorders are diagnosed appropriately by a health-care provider.
 - Headache has been underestimated, under-recognized and under-treated throughout the world.
-

What are headache disorders?

Headache disorders, characterized by recurrent headache, are among the most common disorders of the nervous system. Headache itself is a painful and disabling feature of a small number of primary headache disorders, namely migraine, tension-type headache, and cluster headache. Headache can also be caused by or occur secondarily to a long list of other conditions, the most common of which is medication-overuse headache.

How common are headache disorders?

Globally, it has been estimated that prevalence among adults of current headache disorder (symptomatic at least once within the last year) is about 50%. Half to three quarters of adults aged 18–65 years in the world have had headache in the last year and, among those individuals, 30% or more have reported migraine. Headache on 15 or more days every month affects 1.7–4% of the world's adult population. Despite regional variations, headache disorders are a worldwide problem, affecting people of all ages, races, income levels and geographical areas.

What is the burden due to headache disorders?

Not only is headache painful, but it is also disabling. In the Global Burden of Disease Study, updated in 2013, migraine on its own was found to be the sixth highest cause worldwide of years lost due to disability (YLD). Headache disorders collectively were third highest.

Headache disorders impose a recognizable burden on sufferers including sometimes substantial personal suffering, impaired quality of life and financial cost. Repeated headache attacks, and often the constant fear of the next one, damage family life, social life and employment. The long-term effort of coping with a chronic headache disorder may also predispose the individual to other illnesses. For example, anxiety and depression are significantly more common in people with migraine than in healthy individuals.

Types of headache disorders

Migraine, tension-type headache and medication-overuse headache are of public health importance since they are responsible for high population levels of disability and ill-health.

Migraine

- A primary headache disorder.
- Migraine most often begins at puberty and most affects those aged between 35 and 45 years.
- It is more common in women, usually by a factor of about 2:1, because of hormonal influences.
- It is caused by the activation of a mechanism deep in the brain that leads to release of pain-producing inflammatory substances around the nerves and blood vessels of the head.
- Migraine is recurrent, often life-long, and characterized by recurring attacks.
- Attacks typically include:
 - headache, which is:
 - of moderate or severe intensity
 - one-sided
 - pulsating in quality
 - aggravated by routine physical activity
 - with duration of hours to 2-3 days
 - nausea (the most characteristic associated feature);
 - attack frequency is anywhere between once a year and once a week; and
 - in children, attacks tend to be of shorter duration and abdominal symptoms more prominent.

Tension-type headache (TTH)

- TTH is the most common primary headache disorder.
- Episodic TTH, occurring on fewer than 15 days per month, is reported by more than 70% of some populations.
- Chronic TTH, occurring on more than 15 days per month, affects 1-3% of adults.
- TTH often begins during the teenage years, affecting three women to every two men.
- Its mechanism may be stress-related or associated with musculoskeletal problems in the neck.
- Episodic TTH attacks usually last a few hours, but can persist for several days.
- Chronic TTH can be unremitting and is much more disabling than episodic TTH.
- This headache is described as pressure or tightness, often like a band around the head, sometimes spreading into or from the neck.

Cluster Headache (CH)

- A primary headache disorder.
- CH is relatively uncommon affecting fewer than 1 in 1000 adults, affecting six men to each woman.
- Most people developing CH are in their 20s or older.
- It is characterized by frequently recurring (up to several times a day), brief but extremely severe headache, usually focused in or around one eye, with tearing and redness of the eye, the nose runs or is blocked on the affected side and the eyelid may droop.
- CH has episodic and chronic forms.

Medication-overuse headache (MOH)

- MOH is caused by chronic and excessive use of medication to treat headache.
- MOH is the most common secondary headache disorder.
- It may affect up to 5% of some populations, women more than men.
- MOH occurs by definition on more days than not, is oppressive, persistent and often at its worst on awakening.

Social and economic burden of headache

Headache disorders are a public-health concern given the associated disability and financial costs to society. As headache disorders are most troublesome in the productive years (late teens to

50s), estimates of their financial cost to society – principally from lost working hours and reduced productivity – are massive. In the United Kingdom, for example, some 25 million working- or school-days are lost every year because of migraine alone; this financial cost may be matched by TTH and MOH combined. Headache is high among causes of consulting medical practitioners: one-third of all neurological consultations were for headache, in one survey.

Yet, many of those troubled by headache do not receive effective care. For example, in the United States of America and the United Kingdom, only half of those identified with migraine had seen a doctor for headache-related reasons in the previous 12 months, and only two-thirds had been correctly diagnosed. Most were solely reliant on over-the-counter medications.

Treatment

Appropriate treatment of headache disorders requires training of health professionals, accurate diagnosis and recognition of the conditions, appropriate treatment with cost-effective medications, simple lifestyle modifications, and patient education. The main classes of drugs to treat headache disorders include: analgesics, anti-emetics, specific anti-migraine medications, and prophylactic medications.

Barriers to effective care

Lack of knowledge among health-care providers is the principal clinical barrier. Worldwide, on average, only 4 hours of undergraduate medical education are dedicated to instruction on headache disorders. A large number of people with headache disorders are not diagnosed and treated: worldwide only 40% of those with migraine or TTH are professionally diagnosed, and only 10% of those with MOH.

Poor awareness extends to the general public. Headache disorders are not perceived by the public as serious since they are mostly episodic, do not cause death, and are not contagious. The low consultation rates in developed countries may indicate that many affected people are unaware that effective treatments exist. Half of people with headache disorders are estimated to be self-treating.

Many governments, seeking to constrain health-care costs, do not acknowledge the substantial burden of headache on society. They might not recognize that the direct costs of treating headache are small in comparison with the huge indirect-cost savings that might be made (eg, by reducing lost working days) if resources were allocated to treat headache disorders appropriately.

WHO response

These evident burdens call for action. WHO recognizes this, and is a partner, with the non-governmental organization Lifting The Burden, in the Global Campaign against Headache. This initiative commenced in 2004 and aims not only to raise awareness of headache disorders but also to improve the quality of headache care and access to it worldwide. WHO published the Atlas of headache disorders in 2011, describing the burden due to headache disorders and resources available to reduce them.