# TIPS on the DOORSTEP

NOVARTIS

*A bimonthly newsletter for neurologists and other health care providers who manage migraine.*

VOLUME I ISSUE 2

# THE PREVALENCE AND BURDEN OF MIGRAINE

In this issue, migraine specialist Dr. Dawn C. Buse discusses the prevalence and burden of migraine. A shift in perspective and a better understanding of this debilitating disease can lead to improved management of migraine and can alleviate the burden on patients with migraine and their families.

## MIGRAINE PREVALENCE

Migraine is ranked as the third most on a global scale in 2016, 3 billion persons were estimated to have a headache disorder, migraine in 14.4% (18.9% for women, 9.8% in men), tension-type headache in 26.1% (30.8% for women, 21.4% for men) (Figure).[1]

In the United States, it is estimated that 12% of the adult population, about 18% of women and about 12% of men meet criteria for migraine.[2,3] "This prevalence comes from the American Migraine Prevalence and Prevention study (AMPP)," says Dawn C. Buse, PhD, Clinical Professor in the Department of Neurology at Albert Einstein College of Medicine of Yeshiva University in New York, USA, and co-investigator on the AMPP study. "It's the longest and largest study of migraine prevalence in the world. The study started in 2004, surveyed 120,000 US households and got responses from more than 163,000 individuals," says Dr. Buse.

## THE BURDEN OF MIGRAINE

The study found that migraine is three times more common in women than in men. It can start in childhood and may affect young boys more than it affects girls. However, Dr. Buse says, "the

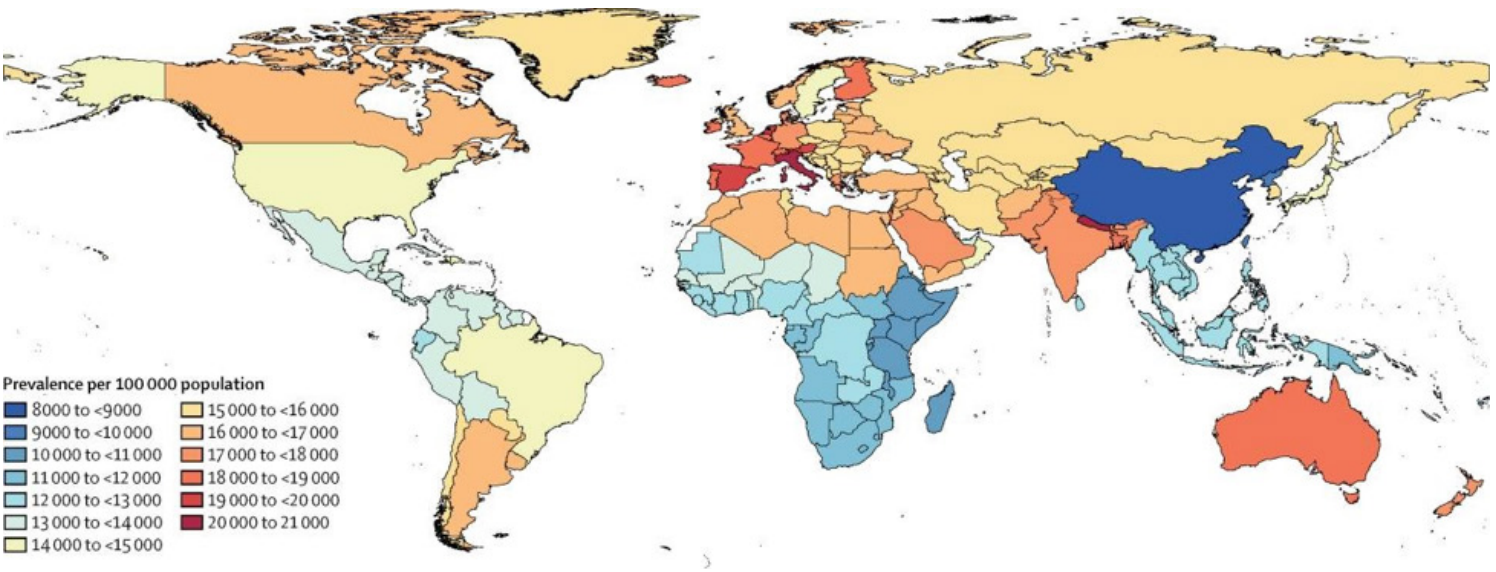


**Figure.** Global prevalence of migraine per 100 000 population by location for both sexes, 2016. Reproduced from GBD 2016 Headache Collaborators. *Lancet Neurol.* 2018;17(11):954-76.[1]

rates of migraine shift once children go through puberty and the hormonal cycle starts. This seems to be when prevalence really starts to rise dramatically in young women compared to young men."patients a disservice by not addressing symptoms earlier on to prevent attacks and the postdromal phase."

"Migraine is most common in midlife, the time of active childbearing potential and the time of greatest work and school responsibilities in our life." Thus, "migraine is most prevalent, most frequent, and most disabling in the years when we have the most responsibilities," says Dr. Buse. After the age of 50 and then the decades of the 60s and 70s for both men and women, migraine prevalence is lower.

Migraine frequency changes for women during the perimenopause and the menopausal periods. It can worsen during perimenopause when hormones are very unstable and changing dramatically. After menopause is complete, which on average is the early 50s to mid-50s—when menstrual cycles have stopped—migraine attack frequency is lower.

The natural course of migraine is that it manifests in adolescence, peaks in the 20s, 30s and 40s, and then gradually declines for both men and women in the later decades. "Few chronic diseases naturally tend to resolve or get better with time," says Dr. Buse, "although certainly telling a teenager or a young person that it will get better when you are in retirement age is not necessarily comforting."

The Chronic Migraine Epidemiology and Outcomes (CaMEO) study,[2,3] for which Dr. Buse is also a co-investigator, found that the burden of migraine increases as attack frequency increases. "Certainly, as migraine days or headache days go up in a month, the burden increases," says Dr. Buse. The study found this true not only with episodic migraine, which is 14 or fewer days a month, and chronic migraine, which is 15 or more days a month, but also with low-frequency episodic migraine, up to 4 days a month, and moderate frequency, episodic migraine, 5 to 9 days per month. "High-frequency episodic migraine, 10 to 14 days per month, affects all aspects of life, that includes negative effect on work, negative effect on school, a negative effect on the family," says Dr. Buse.

## MIGRAINE AWARENESS

According to the American Migraine Foundation (AMF), the terms "migraine" and "headache," have been used synonymously, which has led us to think of migraine as not a serious debilitating disease. This usage has been especially damaging to migraine patients, who have been stigmatized as people who are unable to handle stress. As a patient advocate who sits on the AMF board was quoted, "One of the worst parts about migraine apart from the suffering is that people don't believe you."[4]

The conversation needs to change, say researchers at the AMF. We need to acknowledge that migraine is not simply a headache, it's a neurological disease that causes a multitude of symptoms and can affect every aspect of a person's life. People with migraine are at risk of other serious diseases such as stroke, depression, anxiety, and epilepsy. To help reshape our understanding of migraine, a research initiative of the American Migraine Foundation called the Move Against Migraine campaign has begun the development of a global patient registry to compile information on patients seen in medical clinics around the world as well as a biobank that could be used for future research.[5]

Researchers for the initiative are hoping to develop a better understanding of the genetics of the disease, its remission and progression, treatment and side effects, and targets for new drug therapies. They are aiming for precision medicine (drugs specific for the disease in question) and individualized medicine (right drug for the right patient). The objective is to raise awareness and brand migraine as a neurological disease instead of a non-organic or psychosomatic illness, and thus remove the stigma that patients live with and any barriers to care (to be discussed in the next issue).

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**Dawn C. Buse, PhD**
Clinical Professor of Neurology
Albert Einstein College of Medicine
New York City, New York
Assistant Professor, Clinical Health Psychology Doctoral Program
Ferkauf Graduate School of Psychology
Yeshiva University
New York City, New York



**KIKAKU AMERICA INTERNATIONAL**

**EDITOR:**
PETER SONNENREICH

**MANAGING EDITOR:**
BASSEM WOLLEY, PHARMD

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