

## EDITORIAL

# It Is Time to Improve Headache Service and Migraine Care in Malaysia

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Headache is a common, global (1), medical complaint that is for most self-limiting. Unfortunately, some forms of headache are severe and disabling, presenting chronically with very negative effects on every aspect of life. The most recent Global Burden of Disease Survey 2019 (GBD2019) conducted by the World Health Organization (WHO) listed headache disorders as 14th among global causes of disability-adjusted life years (DALYs) (2). Headache disorders have been estimated to cause about 5% of the global years lived with disability (YLDs). Two types of primary headache disorders were analysed in GBD 2019, namely migraine and tension-type headache (TTH), each with the potential sequela of medication overuse headache (MOH), a secondary headache disorder. Migraine causes a majority of this burden, even though tension-type headache is more prevalent. Indeed, migraine is ranked as the first cause of DALYs and YLDs among young adult women aged 15 to 49 years, followed by lower back pain and depression. Migraine is three times more prevalent among women, with a peak prevalence among those between 35 to 39 years old. When the data are analysed for males and females of all ages, migraine is second only to lower back pain.

Migraine is profoundly burdensome for society, being both disabling and common, with an estimated global adult prevalence of 15%. As a result, the direct and indirect costs of migraine disability are substantial. One example of a large indirect cost due to loss of productivity has been demonstrated in a recent study done in the Malaysian banking sector. The highest monetary loss is attributed to presenteeism, a term for reduced effectiveness at work, with approximately RM 25,000 lost per year for every employee with >3 monthly migraine days. Another measure of indirect cost, absenteeism, was associated with a reported loss of about RM12,000 per year for each employee with severe migraine (3). These substantial indirect costs, in addition to unquantifiable costs such as personal and financial losses due to lack of career advancement, outweigh the direct costs of migraine care (medications and hospitalisation).

Migraine seriously affects society and policymakers

should use public health policy to alleviate its socioeconomic burdens. In the light of increased stress due to the COVID-19 pandemic, migraine has, for some, become more common and more severe (4). The improvement of migraine care should therefore be pursued. More effective and targeted migraine therapies are becoming available (5), but unfortunately, migraine is typically poorly managed by the health service system in most developing countries. Public and professional understanding about migraine remains poor. This is unfortunate as migraine is a manageable chronic disease with an array of available treatment options.

An estimated 3.6 million people in Malaysia are suffering from migraine (6). Most are managed by the primary care doctors, with no dedicated national headache service to date. Misdiagnosis and inappropriate treatment among doctors, in addition to self-medicating practices among patients, has led to ineffective and suboptimal migraine management. As these issues with the healthcare system and people with migraine are mutually reinforcing, they must be tackled together. First, in order to improve migraine understanding and awareness among the public, a national educational campaign on migraine is required. Educational programmes targeting patients and families and including migraine lifestyle management and self-empowerment should be considered. In addition, employers should be targeted with a program concerning migraine burden and potential triggers in the workplace. This will emphasize the importance of psychosocial support and better-quality work environments. Headache education should also be emphasized in the Malaysian medical curriculum. For example, the first dedicated lecture on primary headaches has recently been introduced as part of the neurosciences postgraduate course in Universiti Putra Malaysia.

Secondly, to improve the delivery of migraine care in the Malaysian healthcare system, a pilot structured headache service with clearer migraine patient pathways should be established in Malaysia. The framework should be similar to the three-tier service organisation based on the European Headache Foundation (EHF) and Lifting the Burden (LTB) models. Level 1 consists of

general primary care provided by public health clinics or private general practitioners. Level 2 includes special-interest headache care provided by the medical officers and internal medicine specialist at district or secondary hospitals. Finally, level 3 refers to specialised headache centres to be established within the neurology services of tertiary hospitals, allowing for the integration of clinical services, research and education programmes under a multidisciplinary team consisting of neurology headache specialists, headache clinical nurse, clinical psychologist and physiotherapist. Specialised treatment, including advanced pharmacological and non-pharmacological therapies, will be available. This pilot model will follow the suggested standards and criteria from other successful centres of excellence for headaches in developed countries.

In summary, migraine can produce disability that is much more severe than the 'common headache'. The substantial personal and societal burdens of migraine can be minimised by a two-pronged strategy consisting of educating both the public and professionals, and improvements to the health care system. It is hoped that this pilot headache framework model will help pioneer to a national structured headache service in Malaysia in order to provide better care, reduce migraine burden, and improve the wellbeing of Malaysian people with migraine and their families.

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