

Paolo Martelletti
Timothy J. Steiner
José M. Bertolote*
Tarun Dua*
Benedetto Saraceno*

The definitive position of headache among the major public health challenges. An end to the slippery slope of disregard

Received: 16 May 2007

Accepted in revised form: 27 May 2007

Published online: 11 June 2007

© 2007 The Author¹

* These Authors are staff members of the World Health Organization. The Authors alone are responsible for the views expressed in this publication and they do not necessarily represent the decisions or the stated policy of the World Health Organization

P. Martelletti (✉)

Department of Medical Sciences,
2nd School of Medicine,
Sapienza University of Rome,
Via Vitorchiano 81, I-00189 Rome, Italy
e-mail: paolo.martelletti@uniroma1.it
Tel.: +39-06-3327-4631
Fax: +39-06-3327-4632

T.J. Steiner

Division of Neuroscience
and Mental Health,
Imperial College London, London, UK

J.M. Bertolote • T. Dua • B. Saraceno
Department of Mental Health
and Substance Abuse,
World Health Organization, Geneva,
Switzerland

The demand for a new social understanding of headache disorders can be traced back over more than 30 years. During that period it has become ever more evident and pressing, meanwhile giving birth to research with outstanding results in epidemiology, nosography, pathophysiology, genetics and more, and generating innovative therapeutic molecules and refined diagnostic means. Despite all of this, the weak position of headache disorders within the public health value scale, long apparent to scientists in the field, to physicians, to lay organisations and to people affected by these disorders, has for much of this time meant an increasing disparity with other neurological disorders.

Headache disorders are a major clinical problem, and should be a public health priority. These truths cannot be dismissed; actions are required to stop this progression of headache down a slippery slope of belittling disregard [1]. For ten years, a different trend carrying a new message has been taking shape. Several forces behind this are discernible. One is the birth of the World Headache Alliance, bringing together many lay organisations worldwide into cooperative actions, pursuing objec-

tives that go way beyond the national or local boundaries of each. A mix of lay and non-lay initiatives have appeared [2], the World Health Organization has taken note, and signalled its interest in introductory publications [3], and calls for action are being directed at wide audiences [4]. The final destruction of the slippery slope, at the bottom of which headache disorders would be seen as trivial and undeserving of medical care, has been put within our reach by the launch and expanding achievements of *Lifting The Burden* (LTB), the Global Campaign to Reduce the Burden of Headache Worldwide [5]. LTB's intense activity in support of better information, of political awareness, of epidemiological studies to improve knowledge and understanding of the burden of headache, of university and primary-care education of health-care providers, and of better clinical management of headache, especially in primary care, has provided a sound conceptual basis for the inclusion of headache disorders in WHO's new publication, *Neurological Disorders: Public Health Challenges* [6], which, in turn, gives headache disorders a new cultural identity and social dignity.

¹This is a "Springer Open Choice" article. Unrestricted non-commercial use, distribution, and reproduction in any medium is permitted, provided the original author and source are credited.

Epidemiology and burden of headache

The importance of headache disorders, particularly the primary forms, arises from their high prevalence, their diffusion throughout all geographical areas, their duration (most are life-long conditions) and their imposition of disability and restricted participation upon those affected by them. Many epidemiological studies show that, every year, migraine alone affects more than 10% of the world's adult population, whilst all headache disorders together affect 50% of the world's adults and children [7]. Migraine is the 19th leading causes of disability in the world [8]. Other headache disorders are probably responsible for at least as much disability [7]; if this is confirmed, headache disorders will be well within the top ten causes of disability, and amongst the top five in women. This compelling evidence constitutes the cornerstone of headache's rebuilt image as a major public health problem.

Artificial barriers to care

Social awareness goes hand in hand with political and managerial responsiveness. Both are needed to support structures fit for the purpose of meeting headache-related healthcare needs, able to reduce the costs of headache disorders and prevent their magnification, which is the result of mistreatment. Better care, backed by appropriate health-care policies and priority-setting, and by better medical training programmes, can be expected to mitigate not only the heavy direct damage that headache causes – to the lives of patients, their families and colleagues – but also the very large indirect losses in work productivity [9]. It does not make economic sense to leave headache under-treated, and it is not humane to do so.

Yet, characterisation of headache disorders by health professionals as conditions of low importance, or by people affected by them as “normal” (non-medical) experiences, discourages sufferers from seeking medical care. Alarm, leading eventually to consultation, arises when headache is out of control – a situation that maintains unnecessary suffering and makes management more difficult. Low levels of consultation encourage low levels of healthcare provision, and allocation of few resources, which in turn further discourages consultation and engenders dissatisfaction when consultation does occur. A network of simple care structures, evenly distributed throughout each community, with diagnostic and therapeutic abilities that are well within the scope of primary care, is all that is required. What currently exists falls well below this almost everywhere, often unacceptably so even in developed countries, whereas the gap between these and developing countries is incommensurably large.

These barriers to care are artificial. It is hard to understand why they were ever there, and impossible to justify their continued existence.

Education is the key

Lack of resources is a factor in under-treatment, but it is not an explanation. The diffusion of triptans worldwide may be slow because of their cost, but good headache management is not achieved merely by prescribing triptans and is rarely entirely dependent upon access to this class of drug. Education is the central pillar of adequate care.

Communities of people with headache, their families, physicians, other health-care providers, health-care managers and policy-makers all need to be educated about headache disorders, establishing a permanent bond that leads to an ideal therapeutic headache chain. Progress is seen in several educational initiatives: for doctors, the European Headache Federation summer schools, for example, and, for specialists, the Masters degree programme in Headache Medicine [10]. Education of people with headache promotes appropriate consultation, which does not happen at the moment. Education of health professionals minimises the risk of failed or delayed diagnosis, which currently occurs too often. Prompt and accurate diagnosis allows early therapeutic intervention with stepwise medical management, first in primary care and then, only when necessary, in specialist consultation. Follow-up, so often omitted, is crucial to achieving a good outcome. Without that comes self-treatment, in which lack of education raises the probability of overuse of over-the-counter medications, and worsening illness.

Public health policy

Managed change depends upon supportive policy. Research in the headache area, always alive and rich in innovations, should educate public health policy-makers. To do so, it should be able to translate its findings into new and accessible therapeutic approaches in a short time. The expansion of epidemiologic research in headache, coupled with health-economic analysis, will strengthen our certainties. Meanwhile, the burdens imposed by headache disorders on individuals and society are sufficiently evident to validate a new public health strategy aimed at minimising their negative consequences. If good healthcare structures must be created in countries worldwide, the necessity of equipping them with medical professionals trained in headache at university level is unquestionable. But equally necessary is

recognition of need by those in control of healthcare resource allocation.

WHO's report [6] should leave no doubt in the minds of healthcare policy-makers that headache disorders command their attention, and can no longer be regarded as sim-

ple inconveniences, undeserving of medical care. Lay organisations and professional associations should march together to insist on these requirements. LTB acts in this area both as coordinator and a means of spreading innovation [11].

References

1. Martelletti P (2004) Heightening the awareness of headache disorders. *J Headache Pain* 5:85–86
2. Martelletti P, Leonardi M (Eds) (2003) International forum on global impact of migraine. *J Headache Pain* 4:S1–S90
3. World Health Organization (2000) Headache disorders and public health. Education and management implications. WHO, Geneva: WHO/MSD/MBD/00.9
4. Leonardi M, Steiner TJ, Scher AI, Lipton RB (2005) The global burden of migraine: measuring disability in headache disorders with WHO's Classification of Functioning, Disability and Health (ICF). *J Headache Pain* 6:429–440
5. Steiner TJ (2004) Lifting the burden: The global campaign against headache. *Lancet Neurology* 3:204–205
6. World Health Organization (2006) Neurological disorders: public health challenges. WHO, Geneva. WL 140, pp1–218
7. World Health Organization (2001) World Health Report 2001. WHO, Geneva, p 28
8. Stovner LJ, Hagen K, Jensen R et al (2007) The global burden of headache: a documentation of headache prevalence and disability worldwide. *Cephalalgia* 27:193–210
9. Berg J, Stovner LJ (2005) Cost of migraine and other headaches in Europe. *Eur J Neurol* 12 [Suppl 1]:59–62
10. Martelletti P, Haimanot RT, Lainez MJ et al (2005) The global campaign (GC) to reduce the burden of headache worldwide. The International Team for Specialist Education (ITSE). *J Headache Pain* 6:261–263
11. Steiner TJ (2005) Lifting The Burden: the global campaign to reduce the burden of headache worldwide. *J Headache Pain* 6:373–377