



## **WFN launches first World Brain Day on 22 July**

### **“Our brain – our future”: Awareness-raising for the importance of brain health – Emphasis on prevention of underestimated burden of disease**

*On 22 July, the World Federation of Neurology (WFN) launches the first “World Brain Day,” an event dedicated to bringing more attention to the importance of brain health and the prevention of brain diseases, a largely underestimated health problem. Brain disorders, comprising mental, neurological and substance-use conditions, constitute 13 percent of the global burden of disease, surpassing both cardiovascular disease and cancer. Many of them are preventable and treatable, but diagnostic and therapeutic resources are unequally distributed globally.*

London, July 2014 – “There is no health without brain health. Our brain is our most amazing and complex organ, and its functioning is most closely linked to the health of the whole human being,” according to Dr Raad Shakir, President of the World Federation of Neurology (WFN). “However, there is a lack of alertness in the public and among decision makers for the essential role of the brain and its health. This is also true for the individual and collective burden arising from brain diseases and in particular from neurological diseases. It is becoming increasingly clear that these disorders, such as stroke and dementia, are projected to rise at a rate that could overwhelm our health care systems. Hence a new emphasis has to be developed on prevention. Neurologists are the guardians of the brain and need to take the leading role in advancing new approaches in stemming the tide of neurological diseases.” Dr Shakir addressed this appeal to the public at the launch of WFN’s first “World Brain Day” on 22 July. The date for the new awareness day was not chosen at random: The WFN was founded on 22 July 1957 in Brussels.

“The complexities of the brain and of neurological diseases often become a barrier for public awareness. Our most important goal with this novel campaign is to present brain health in all its aspects and social dimensions and sensitize the public to its significance. In doing so, we want to support those affected by brain disease and in particular neurological diseases and inform the broad public about the importance of prevention,” says Dr Mohammad Wasay, Chair of the WFN’s Public Awareness and Advocacy Committee. “One in three of us will get dementia or stroke during our lifetime. Diseases affecting the brain are the single most important cause of disability in the world. It’s time to act. This is why we are taking this initiative to promote better brain health globally.”

### **Burden of disease largely underestimated**

The burden of brain disorders and neurological diseases is largely underestimated, however, according to WFN President Shakir. “Stroke and traumatic brain injuries are two most important causes of disability around the globe, one to two percent of the global population suffers from some kind of disability related to traumatic brain injury. Worldwide, stroke is the second commonest cause of death after ischaemic heart disease and ahead of chronic obstructive pulmonary disease. According to WHO data, neurological diseases alone are responsible for between 4.5 and 11 percent of all burden of disease, depending on whether

you look at low- or high-income economies. This is far higher than the number of respiratory ailments, gastrointestinal disorders or malignant tumours.”

Neurological diseases are a major cause of death. According to the WHO, they account for 12 percent of deaths worldwide, a figure that varies according to levels of economic development. Lower-middle-income countries are the hardest hit. They account for nearly 17 percent of deaths attributable to neurological causes because both infectious and non-communicable neurological diseases contribute to mortality. Of all neurological illnesses, stroke and other cerebrovascular disorders are by far the commonest cause of death, accounting for 85 percent of all fatalities.

Yet, the incidence of many neurological conditions such as dementia, Parkinson’s or stroke will skyrocket as populations age. According to the WHO, the number of disability-adjusted life years (DALYs) attributable to neurological illnesses – years lost due to premature death combined with the equivalent years of healthy life lost through poor health or disability – is expected to rise from 92 million worldwide in 2005 to 103 million in 2030. This represents an alarming 12 percent increase. For demographic reasons alone, years of life lost in connection with Alzheimer’s and other forms of dementia in particular will rise most dramatically, by around 66 percent. The lion’s share – more than 55 percent – of equivalent years of life lost through neurological disorders is attributable to cerebrovascular illnesses such as stroke and intracranial haemorrhage. It is estimated that in 2015, 50 million healthy life years will be lost due to stroke alone.

### **High proportion of the world population not getting adequate care**

“The burden of illness is unevenly distributed, with some neurological disorders more common in different parts of the world, or affecting different sections of the population”, Prof Wolfgang Grisold, Secretary General of the WFN, points out. “Although great progress has been made in diagnosis and therapy of brain diseases, appalling disparities in the availability of treatment persist, with many people all over the world having either no access or inadequate access to neurological care.”

As the WHO has shown, less than 9 percent of the world’s population has access to more than one neurological hospital bed per 10,000 inhabitants. The deficiencies are particularly striking in Africa and Southeast Asia. While in prosperous countries there is an average of three neurologists for every 100,000 people, the figure is only 0.03 per 100,000 in low-income countries. For many of the neurological disorders, inexpensive but effective treatments are available, Dr Wasay argues: “It is especially tragic when patients do not even have access to the most basic medication. Take the example of epilepsy: Up to 70 percent of people with epilepsy could become seizure-free with antiepileptic drug treatments, but the proportion of patients who remain untreated at any given time is greater than 80 percent in most low income countries.”

### **Brain health needs to be prioritized on the political agenda**

“Introducing World Brain Day is also meant as a wake-up call to political decision-makers. Despite the huge burden they cause, neurological conditions are largely absent from the national and international health agendas”, says WFN President Shakir. “Not only do neurological diseases cause individual suffering, they also have much greater social and economic relevance than people often assumed.” Brain disorders are costly: For Europe alone, the latest figures published by the European Brain Council and the CDBE 2010 Study Group put the annual costs of brain diseases for EU economies at 798 billion euro, of which 60% was attributable to direct costs and 40% to lost productivity. Neurological disease alone account for 336 billion euro.

WFN Secretary General Prof Grisold: “The burden of neurological disorders continues to be underestimated, while in fact they should be treated as one of the highest-level healthcare priorities. The message we are sending out with the first World Brain Day in this respect is clear: Political and funding priorities need to shift, governments and international organisations need to prioritize brain health.”

Much of this burden is preventable. “One of the important actions required in the field of prevention are immunization programmes for the prevention of neuroinfections and the neurological consequences of other infections,” Dr Wasay points out. “Other diseases such as stroke can be prevented through a comprehensive lifestyle approach by influencing a variety of interrelated risk factors such as blood pressure, cholesterol, smoking, healthy diet or diabetes. More than 100 million DALYs could be gained by effective strategies to reduce the burden of stroke and traumatic brain injury alone.”

### **More than 100 national societies spread the campaign**

More than 100 national member societies of the WFN are carrying the messages of the first World Brain Day to the national, regional and local levels. To support their activities, WFN is providing promotional and educational materials. An important focus is on the use of social media, in particular Facebook and twitter.

*Promotional and material relating to the World Brain Day: [www.wfneurology.org/](http://www.wfneurology.org/)*

*WFN on facebook: [www.facebook.com/wfneurology?fref=ts](https://www.facebook.com/wfneurology?fref=ts)*

*WFN on twitter: [@wfneurology](https://twitter.com/wfneurology)*

*Hashtag: [#WorldBrainDay](https://twitter.com/WorldBrainDay)*

Sources for data quoted in the release: Birbeck et al, Global opportunities and challenges for clinical neuroscience, JAMA 2014; Editorial, Europe’s shocking statistics on neurological and mental disorders demand a shift in priorities, Nature 2011; Gustavsson et al, Cost of disorders of the brain in Europe 2010, European Psychoneuropharmacology 2011; Collins et al, Grand challenges in global mental health, Nature 2011; Olesen et al, The economic cost of brain disorders in Europe. European Journal of Neurology 2012; WHO: Neurological Disorders: Public Health Challenges; WHO Atlas, Country Resources for Neurological Disorders

### **WFN – World Brain Day Press Office**

Dr Birgit Kofler

B&K – Bettschart&Kofler

E-Mail: [kofler@bkkommunikation.com](mailto:kofler@bkkommunikation.com)

Mobile: +43 676 636 89 30

Phone Vienna office: +43 1 319 43 78 13

Skype: [bkk\\_birgit.kofler](https://www.skype.com/people/bkk_birgit.kofler)