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World Brain Day 2021: Join us to "Stop Multiple Sclerosis": A World Federation of Neurology and Multiple Sclerosis International Federation Collaboration

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All of us have been enveloped in the current COVID-19 pandemic health and humanitarian emergency over the last 18 months. Yet, despite the difficulty, we must as physicians continue to find a way through and bring out the best of humanity. In this setting, we have written this commentary on brain health and World Brain Day (WBD) 2021.

Neurological disorders are the leading cause of disability and the second leading cause of mortality worldwide.¹ Despite these alarming statistics, the gaps and disparities in the distribution of neurological resources and therapeutics worldwide are enormous. The global median of the total neurological workforce, defined as the number of neurologists, neurosurgeons, and child neurologists available in a country, is only 3.1 per 100,000 inhabitants. Low-income countries report a median of 0.1 per 100,000 inhabitants, compared with 7.1 per 100,000 in high-income countries. The disparity in workforce distribution is paralleled by the same in health resources and access to medications. All relate to economic disparities which we, as physicians, can do little to remedy. What we can do is press for a change in priorities in all countries where disparity exists.

One of the best ways to address these disparities is through widespread global advocacy and campaigns. The WBD is an annual activity of the World Federation of Neurology (WFN) held on July 22, commemorating the establishment of the WFN in 1957. This is a global event for the WFN devoted to raising awareness and advocating for brain health and neurosciences. The previous topics for WBD have been "Our brains our Future" (2014), "Epilepsy" (2015) partnering with International League Against Epilepsy (ILAE), "Brain Health and the Ageing Population"(2016), "Stroke is a Brain Attack – Prevent it and Treat it" (2017) partnering with World Stroke Organisation (WSO), "Clean Air for Brain Health" (2018) partnering with the WFN Environmental Neurology Specialty Group and "Migraine, and the Painful Truth" (2019) partnering with International Headache Society (IHS) (for details, please see the WFN website). The focus of the 2020 WBD was Parkinson's disease (partnering with International Parkinson's and Movement Disorders Society). This year the theme is Stop Multiple Sclerosis. The WFN is collaborating with the Multiple Sclerosis International Federation (MSIF) with the ambitious plan of reaching out to 100 million people through the global advocacy campaign to raise awareness of brain health to stop multiple sclerosis (MS).

An estimated 2.8 million people live with MS worldwide.² Approximately 70% of people with MS are women. From 1999 to 2019, among adults 20–40 years of age, the ratio of women to men with MS has increased from 2:1 to $3:1.^3$

According to the latest iteration of the MS Atlas 3rd Edition, 90,000 people are living with MS in Canada at present. This equates to 1:400 people in Canada are living with MS. It is expected that in 2031, the number of Canadians with MS will rise to 133,635, with a prevalence of 220 cases per 100,000 men and 620 cases per 100,000 women.⁴ MS affects young adults during the prime of their lives with the associated heavy cost to health and the economy. In Canada, the total per capita healthcare cost, excluding out-of-pocket expenses, for adults aged 20 years and older with MS was reported as \$16,800 in 2011 and the total annual health costs for MS (without taking into consideration out-of-pocket expenses) are expected to reach approximately \$2.0 billion by 2031.⁴

The 2018 Global Burden of Neurological Disease analysis suggests the doubling of MS in many parts of the world, highlighting these concerns.⁵

How should we respond to this threat? History seems to show us the way forward. Just as the community changed behavior to

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Correspondence to: Tissa Wijeratne, Director, Department of Neurology, Western Health, Sunshine Hospital, St Albans, Victoria, 3021, Australia. Email: tissa.wijeratne@wh.org.au TW conceptualized the idea and drafted the original manuscript. WC critically reviewed and edited the manuscript. Both TW and WC approved the final manuscript. Both TW and WC declare no conflicts of interests.

stop the spread of COVID-19 and developed a concerted global approach with the COVAX program from the WHO with universal access to vaccines, a focused effort on resources and knowledge gaps in MS need to be addressed as a matter of priority. Despite the enormous advances in MS therapeutics, 70% of countries are not targeting early diagnosis and are not able to provide access to effective treatment; a situation that is unfair and unreasonable. Thus, as the healthcare systems re-arranged infrastructure, teams, healthcare delivery systems with the aim of providing the universal access to COVID-19 vaccines in the middle of the pandemic. We propose the access to optimal care for MS worldwide should be offered in the same manner. Just as the funders and policymakers devoted effort toward the universal access to vaccines against COVID-19, similar efforts are required to address access to MS treatment.

These can be achieved with a coordinated, collaborative, global advocacy action plan. WBD 2021-Stop Multiple Sclerosis is the opportunity to act immediately.

Our primary focus is to advocate five key messages for MS:

KEY MESSAGES

- **Disability:** MS is a debilitating neurological disease that impacts every aspect of a person's life, with effects ranging from cognitive impairment to significant physical disability.
- **Prevalence:** 2.8 million people of all ages globally are affected by MS, and someone receives this life-altering diagnosis every 5 minutes.
- Education: We must work with healthcare professionals to recognize the signs and symptoms of MS so people can be diagnosed early and effectively treated.
- Access to Treatment: Disease-modifying treatments slow disease progression, dramatically improving the quality of life for those living with MS, yet access to these medications is unavailable in many parts of the world.
- Advocacy: We can stop MS by diagnosing earlier, providing better access to life-changing treatments, and advocating for improving the quality of life for those living with MS and their caregivers.

MATERIALS AND COLLABORATION

This WBD (July 22 2021 to the next WBD campaign in 2022), the WFN seeks to improve the awareness of MS globally. Material such as a PowerPoint slide kit, web banners, social media posts, posters, and promotional videos can be downloaded by anyone interested in this ambitious global advocacy campaign to stop MS. In the last few years, the WFN has partnered with other international organizations in campaigning. This year, we have partnered with the MSIF. We would also like to invite the Canadian Neurological Sciences Federation and your readers to consider playing a part in this year's WBD campaign: Stop Multiple Sclerosis. We invite you to join our 2.8 million social media post-campaign to promote better brain health this year. Post a message on your social media channels stating you support and endorse the WBD campaign. Brain health matters. You can participate by doing something as small as posting our banner ad, posting our social media messages and images, and sharing them among your social media networks. You are welcome to download our WBD2021 toolbox here (https://www.dropbox.com/sh/ dcgfykjxm7el788/AAA1c7u5aKZAXXffrDMG6fqUa?dl=0). You are welcome to share our WBD video collections here (https:// wfneurology.org/world-brain-day-2021). We welcome you to pre-register for the live webinar on July 22 2021, here (https:// register.gotowebinar.com/register/2337977101241355).

Advocacy is a key part of our job.^{6,7} We encourage all readers to join us with our ambitious campaign to end MS. Let us bring the best human qualities out of this global pandemic and work together to promote better brain health.

SUPPLEMENTARY MATERIAL

To view supplementary material for this article, please visit https://doi.org/10.1017/cjn.2021.147.

DISCLOSURES

The authors have no conflicts of interest to declare.

REFERENCES

- Collaborators GBDN. Global, regional, and national burden of neurological disorders, 1990-2016: a systematic analysis for the Global Burden of Disease Study 2016. Lancet Neurol. 2019; 18:459–80.
- Walton C, King R, Rechtman L, et al. Rising prevalence of multiple sclerosis worldwide: insights from the Atlas of MS, third edition. Mult Scler. 2020;26:1816–21.
- Mendibe Bilbao M, Boyero Durán S, Bárcena Llona J, Rodriguez-Antigüedad A. Multiple sclerosis: pregnancy and women's health issues. Neurologia (Engl Ed). 2019;34:259–69.
- Amankwah N, Marrie RA, Bancej C, et al. Multiple sclerosis in Canada 2011 to 2031: results of a microsimulation modelling study of epidemiological and economic impacts. Health Promot Chronic Dis Prev Can. 2017;37:37–48.
- Wallin MT, Culpepper WJ, Nichols E, et al. Global, regional, and national burden of multiple sclerosis 1990–2016: a systematic analysis for the Global Burden of Disease Study 2016. Lancet Neurol. 2019;18:269–85.
- Wijeratne T, DePold Hohler A. Residency training: advocacy training in neurology: lessons from the Palatucci advocacy leadership forum. Neurology. 2013;80:e1–3.
- Advocacy in Neurology. Place of publication not identified: Oxford University Press; 2019.