



OPEN ACCESS

EDITED AND REVIEWED BY
Hans-Peter Hartung,
Heinrich Heine University, Germany

*CORRESPONDENCE

Jinming Han
✉ hanjinming1202@126.com
Edgar Carnero Contentti
✉ junior.carnero@hotmail.com

RECEIVED 11 November 2023

ACCEPTED 20 November 2023

PUBLISHED 30 November 2023

CITATION

Han J, Carnero Contentti E and Liu J (2023)
Editorial: Real-world study of multiple sclerosis
and related diseases in developing countries.
Front. Neurol. 14:1336598.
doi: 10.3389/fneur.2023.1336598

COPYRIGHT

© 2023 Han, Carnero Contentti and Liu. This is
an open-access article distributed under the
terms of the [Creative Commons Attribution
License \(CC BY\)](#). The use, distribution or
reproduction in other forums is permitted,
provided the original author(s) and the
copyright owner(s) are credited and that the
original publication in this journal is cited, in
accordance with accepted academic practice.
No use, distribution or reproduction is
permitted which does not comply with these
terms.

Editorial: Real-world study of multiple sclerosis and related diseases in developing countries

Jinming Han^{1*}, Edgar Carnero Contentti^{2*} and Ju Liu³

¹Department of Neurology, Xuanwu Hospital, Capital Medical University, Beijing, China,

²Neuroimmunology Unit, Department of Neurosciences, Hospital Alemán, Buenos Aires, Argentina,

³Department of Neurology, The First Affiliated Hospital of Zhengzhou University, Zhengzhou, China

KEYWORDS

multiple sclerosis (MS), treatment, developing countries, neuromyelitis optica spectrum disorder (NMOSD), MOGAD

Editorial on the Research Topic

Real-world study of multiple sclerosis and related diseases in developing countries

Multiple sclerosis (MS) is an inflammatory and neurodegenerative disease of the central nervous system (CNS), serving as the leading cause of non-traumatic neurological disability in young people worldwide. MS and related diseases, such as myelin oligodendrocyte glycoprotein antibody-associated disease (MOGAD) and neuromyelitis optica spectrum disorder (NMOSD), are associated with an important financial burden due to healthcare resource utilization and the cost of long-term treatment strategies. Potential disparities and barriers to health care in developing countries should not be ignored (1), while populations in resource-limited regions are usually understudied. Notably, early diagnosis of these diseases and access to optimal management and long-term therapies are critical to minimizing disability over time in affected patients.

For example, in this Research Topic, [Luo et al.](#) established clinical prognostic models to predict visual disability in Chinese patients with NMOSD using retrospective medical data, with serum aquaporin-4 positivity, optic neuritis at disease onset, and older age of onset being significant risk factors. These predictors need to be validated in external disease cohorts, and then neurologists can decide whether these selected patients with NMOSD should be treated with more effective drugs during the early disease course.

[Boldrini et al.](#) complemented the scope of this Research Topic by describing a Brazilian patient with NMOSD (presenting short myelitis) who had increased expression of Gzmb in circulating T and B cells during rituximab treatment and further developed fatal venous thromboembolism, highlighting the measurement of Gzmb expression in circulating lymphocytes as a potential safety biomarker during the treatment of NMOSD.

[Duan et al.](#) summarized the rehabilitation assessment and treatment in clinical practice to promote functional recovery in MS patients. Some novel rehabilitation technologies, including transcranial magnetic stimulation, transcranial direct current stimulation, virtual reality, robot-assisted gait training, and telerehabilitation, were discussed in this review. These technologies should be used to improve the quality of life of patients in developing countries.

[Pandit et al.](#) compared the live cell-based assay (unavailable in many developing countries) and the fixed cell-based assay for the diagnosis of MOGAD in India, and the results showed a high efficiency of the fixed cell-based assay for the detection of serum MOG-IgG in the 1:10 dilution.

Differences in management and access to the best health care are a significant problem worldwide, including in developing countries. The work included in this Research Topic highlights the importance of collaborative efforts to improve the quality of life of people with MS and related disorders in developing countries.

Author contributions

JH: Writing—original draft. EC: Writing—review & editing. JL: Writing—review & editing.

Funding

The author(s) declare that no financial support was received for the research, authorship, and/or publication of this article.

References

1. Carnero Contentti E, Giachello S, Correale J. Barriers to access and utilization of multiple sclerosis care services in a large cohort of Latin

Conflict of interest

The authors declare that the research was conducted in the absence of any commercial or financial relationships that could be construed as a potential conflict of interest.

The author(s) declared that they were an editorial board member of Frontiers, at the time of submission. This had no impact on the peer review process and the final decision.

Publisher's note

All claims expressed in this article are solely those of the authors and do not necessarily represent those of their affiliated organizations, or those of the publisher, the editors and the reviewers. Any product that may be evaluated in this article, or claim that may be made by its manufacturer, is not guaranteed or endorsed by the publisher.

American patients. *Mult Scler.* (2021) 27:117–29. doi: 10.1177/1352458519898590