

Editorial

Tackling Parkinson's Disease as a Global Challenge

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It will not have gone unnoticed by the readership of Journal of Parkinson's Disease (JPD) that we are currently facing a Parkinson's disease (PD) pandemic [1]. The World Health Organization's (WHO) Global Burden of Disease study evaluated data from 195 countries and territories over the period from 1990 to 2016 and concluded that PD is the fastest growing neurological disorder worldwide in terms of disability and death [2]. It has been estimated that the number of people with PD over the age of 50 years is expected to reach around 9 million by 2030, a doubling since 2005, rising to over 12 million by 2040 [3]. These escalating numbers reflect

a global phenomenon and present a very real public health crisis that places a significant burden on already over-stretched national healthcare systems [4, 5]. However, a closer look at the circumstances underpinning this shared global trend reveals substantial differences between regions, not only in PD prevalence and potential underlying causes (which can be influenced by a range of genetic, environmental, and socioeconomic factors), but also in the challenges of providing optimal care for patients, including resource limitations, lack of equitable access to effective therapies, or lack of availability of skilled personnel, particularly in low-to-middle income countries (LMIC) [6–11].

The article by Kim and colleagues in the previous issue of JPD provides important insights from Latin America regarding the burden of parkinsonism and PD on health service use (HSU) and

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patient outcomes across six countries in the region: Cuba, Dominican Republic, Peru, Venezuela, Mexico, and Puerto Rico [12]. Data for the 12,865 participants included in the analysis were drawn from the 10/66 Dementia Research Group's population-based, prospective cohort study which includes adults aged over 65 years living in LMIC. Baseline assessments were conducted from 2003 to 2007 and followed-up approximately four years later to determine the prevalence of parkinsonism and PD, HSU (community-based care or hospitalization), the patients' levels of dependency, and mortality rates. Kim and colleagues found that parkinsonism and PD were associated with a significant healthcare burden with patients having a substantially greater risk of hospital admission, dependency, and death than people of similar age without these conditions. Importantly, only a third of the PD cases identified in this study had a previous PD diagnosis, which indicates that most of the PD cases were undiagnosed. Therefore, most cases were unlikely to be aware of their diagnosis, and the proportion of PD cases receiving medication were likely to be low, which may lead to greater risk of adverse outcomes, such as increased rates of hospitalisation, dependency, and even mortality. The authors highlight the need for greater public health measures to reduce the morbidity and mortality associated with PD across Latin America, such as improving public awareness of the condition, strengthening efforts to screen for PD, better initial management in the primary care setting and timely referral for specialist care. Regionally focused studies, such as this one, provide valuable information for policy makers and healthcare providers to help improve care provision and identify gaps between resource availability and patients' needs.

The region of Latin America is certainly not alone in facing the accelerating burden of PD and the need to mobilise public health resources to manage a chronic disease that ideally requires multidisciplinary care [13]. Evidence from the recent COVID-19 pandemic has clearly demonstrated that our global healthcare systems are fragile, unprepared, and fragmented in the face of such significant challenges, and this pandemic has amplified existing inequalities in care for neurological diseases [14]. Put bluntly, we are not ready for any form of pandemic, whether it is one occurring rapidly like COVID-19, or one with a more gradual progression like PD. Several recent studies focusing on different countries and regions, including Africa, the Middle East, Southeast Asia, the Western Pacific Region, Indochina, and Thai-

land, have identified that LMIC often bear an unequal burden when it comes to PD prevalence, and this is often coupled with disparities in terms of healthcare access, quality, and patient outcomes [6–9, 15, 16]. These inequalities in healthcare for people with PD are not limited to LMIC but are also evident in developed countries and regions, such as the USA and Europe, that are generally perceived to have more robust healthcare infrastructures and better access to the latest treatments [17, 18]. Health inequality in PD is therefore a truly global phenomenon which needs to be addressed.

The reality is that the PD pandemic is well underway, so we should not just hope for the best or only react once problems reach our own doorstep. Instead, we should unite and collaborate so we can face these challenges with knowledge and skill whilst working towards effective solutions. To ensure better outcomes for people with PD, improvements are needed in a range of different dimensions from understanding disease pathogenesis, treatment accessibility and availability to education, carer support, and even preventive strategies. Many of these aspects align with the action steps to address global disparities in PD, proposed by the WHO [2]. Based on their observations of the global disparities in PD, the WHO issued a call to all stakeholders, including governments, public health organisations, and healthcare professionals, to focus on six 'avenues for action' to address these problems at a global level: disease burden, advocacy and awareness, prevention and risk reduction, diagnosis, treatment and care, caregiver support, and research [2].

JPD aims to be part of this concerted global initiative alongside the rest of the scientific community. To reflect this commitment, JPD is launching a new journal section entitled '**Global Parkinson's Disease**' which aims to highlight the diverse challenges and unique features of PD in different geographical regions. As with all submissions to JPD, we welcome original research in clinical medicine, translational research, and basic science from all members of the PD healthcare and research communities for this new section.

While the article by Kim and colleagues [12] is the first example of such a contribution, the 'Global Parkinson's Disease' section aims to do more than just highlight challenges. We also want to share effective solutions and celebrate successful strategies or efforts being made to overcome the challenges being faced in countries and regions around the world. Other examples of the latest research to be included in

the 'Global Parkinson's Disease' section include the pathophysiology of PD, impact of environmental factors, access to and availability of treatments, and use of new technologies to improve care provision, but this is not exhaustive, and we look forward to receiving submissions on other relevant topics relevant to PD as a disease experienced around the globe.

There is no perfect answer to managing the PD pandemic, but a crisis of global proportions requires global collaborative efforts. With this new section, JPD is committed to facilitating the communication and sharing of knowledge, insights, and skills across countries and regions which will undoubtedly benefit the PD community worldwide.

CONFLICT OF INTEREST

None of the authors have any conflicts of interest to report that are relevant to this publication.

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AUTHORS' ROLES

1) Research project: A. Conception, B. Organization, C. Execution;

2) Manuscript: A. Writing of the first draft, B. Review and Critique.

RB: 1A, 1B, 1C, 2A, 2B.

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