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# Editorial

World Health Organization have just launched a Blueprint for Dementia Research.

Some notes to boost dementia research in Latin America...

La Organización Mundial de la Salud acaba de lanzar un Blueprint for Dementia Research. Algunas notas para impulsar la investigación sobre la demencia en América Latina...

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Dementia is the most important cause of disability and dependency in older adults and currently affects more than 55 million people, 60% of whom live in Low- and Middle-Income Countries (LMIC). The number of people with dementia with increasing life expectancy will grow globally in the coming years, but even more in LMIC such as the Latin American (LA) countries (Figure 1). This region's hallmark is ethnic, cultural, educational, and economic diversity and disparity (World Health Organization-WHO, 2021).

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150 100 89.28 Millons 77.6366.45 56.16 50 46.74 38.72 32.30 27.28 24.73 27.95 31.72 35.71 39.14 42.18 21.97 19.50 0 2015 2020 2025 2030 2035 2040 2045 2050 High Income Low and Middle Income

Figure 1. The growth in number of people with dementia.

Source: Adapted from Fleming et al. (2022).

Despite international recognition that dementia research needs to be accelerated, it remains fragmented, with wide variation in the types and levels of investment, as well as the quality of research (WHO, 2022).

If the world were mapped according to how many scientific research papers each country produced, it would take on a rather bizarre, uneven appearance. The Northern hemisphere would balloon beyond recognition. The global south, including LA, would effectively melt off the map. The Figure 2 is based on data from 2001 but the 2011 has very little change.

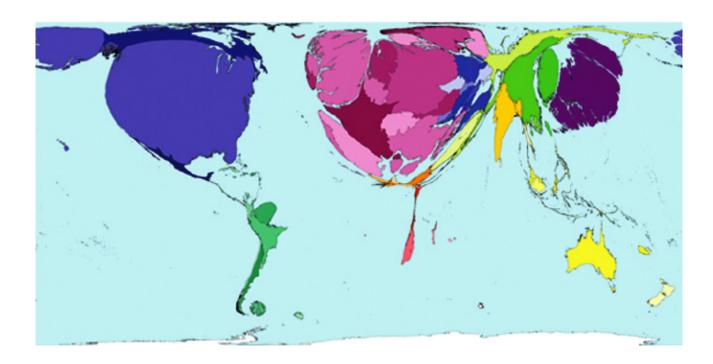


Figure 2. World map based on scientific research papers produced.

Source: Adapted from Low et al. (2007).

Therefore, most of dementia patients will be in regions where research is not conducted or not adequately published. This is even more serious with respect to research on new Alzheimer disease treatments, less than 2% of which is conducted in Latin America.

Based on previous experience from COVID 19 demonstrating that coordinated actions by all actors in the global health system leads to rapid and effective progress in research and development, WHO proposed a similar plan to fight the silent epidemic of dementias. On the other hand, the impact that dementia will have in the coming years, current exclusion of low- and middle-income countries from research, and the increased of dementia in these countries have contributed to the development of this proposal to be implemented by the different actors involved in the health system to achieve greater efficiency, equity and impact.

On this basis, the WHO (2022) has just launched "A Blueprint for Dementia Research" with the aim of supporting the global prioritization of dementia research and providing a coordination mechanism among stakeholders to facilitate the generation of timely and high-quality evidence, fast-track innovation, foster effective implementation of research, and guide resource mobilization (Figure 3).

The primary audience of the "blueprint" should be national and international research agencies, non-governmental organizations, regulatory authorities, civil society, and the dementia research community.



Figure 3. A Blueprint for Dementia Research launched by WHO.

Source: Book cover adapted from WHO (2022).

Figure 4. Themes developed and the 15 strategic objectives from WHO.



Source: Adapted from WHO (2022).

The eight drivers of dementia research identified by WHO are considered essential to create such an environment and support significant advances in this field. We wanted to highlight in this editorial the concept related with boost research in LMIC (Figure 4).

### Empowerment and engagement of people with living experience

People with live experience of dementia (patients, their families, communities, and caregivers formal and informal caregivers) should be involved in all aspect of dementia research to ensure that research is directly designed to maximize real world benefits.

# Diversity and equity

As we describe the hallmark in Latin America is diversity and disparity and under representation in global research. The blueprint notes describe that the principles of equity and diversity must be maintained in all aspect of dementia research. Equity must also be ensured for researchers working in LMIC, including Latin-American countries (Figure 5).

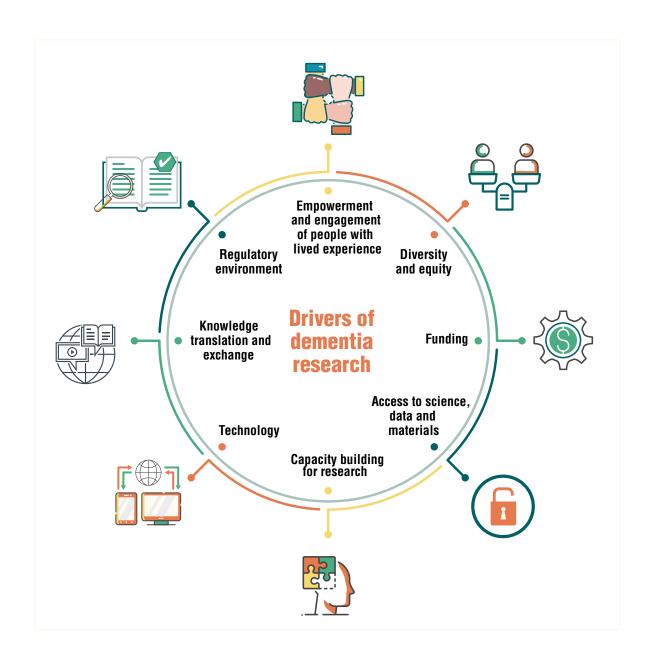


Figure 5. Drivers of Dementia Research proposed by WHO.

Source: Adapted from WHO (2022).

# **Funding**

Local research funding is scared in LA, less than 1% from GDP compared with HIC such as the USA or Europe. Funders should require that a portion of their awards be allocated to collaboration between HIC and LMIC in the design and execution of studies. Appropriate funding of researchers in LMIC and fostering real, transparent research collaboration will decrease the power imbalance and the dependence on HIC institutions, increase output and representation of LMIC in data and result in substantial, inclusive global dementia research.

# Access to science, data and materials

Access to science in LA is limited, open access publishing or paid subscription to Journal are inaccessible for LA researcher. We need democratization of the science, the possibility to published without payment and free access to all journals. Data sharing of clinical, biological, or imaging can be promoted based in regional registries and international collaboration. But we must work on intellectual protections. Sharing materials, protocols, and procedures between HIC and LMIC is very important to understand data with international standards. Based on these countries and region should be developed, validate and cultural appropriated.

# Capacity-building for research

Something very important for the development of centers in LA is to include in regional and international collaboration the possibility to improve the capacity of research of local peoples and centers. Training programs (e.g.: fellowships, workshops; postgraduate courses) should be organized to increase the capacity and capability of researchers. Research capacity and infrastructure would be a priority in any international collaboration.

# **Technology**

Technological advances (digital medical records; smart devices; common data bases) should be transfer from facilities in HIC to those in LMIC.

### Knowledge transferring

Data produced in LMIC should be used as transfer experience to clinical practice. Regional collaborations should be encouraged, and LA data should be used also for LA patients.

# Regulatory environment

A sound, well-formulated and transparent policy environment is a key driver of research and an important facilitator of collaborations and successful research implementation.

#### Conclusions

Dementia in the context of increasing life expectancy will continue to increase in frequency in the coming years and this will be much more significant in LA. Currently neuroscience research in Latin America is scarce and with little international relevance. We should consider strategies to democratize research and be more equitable between HIC and LMIC countries. The WHO launched the Blueprint for Dementia research to promote and coordinate dementia research in an organized

manner around the world. This report contains numerous suggestions for the inclusion and promotion of LA research in the global context. However, we should not limit ourselves to sending raw data or biological samples from LMICs to HICs but should promote regional networks and international collaborations. We should not be happy with colonization of LA, but we should take advantage of partnerships with HIC to develop local capabilities. We need funds to develop research in LA, not only to pay fees, but also to increase training of local researchers and the possibility of improving installed capacity, technological equipment, and regional research infrastructure. Finally, we should prioritize the transfer of the new knowledge for better care of local patients.

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