



WSO Campaign Skills Workshops Case Study: Brazilian Stroke Network

Part 1:

Stroke care in Brazil before 2008

Cardiovascular diseases were one of the top three reasons for all hospital admissions in Brazil in 2006. In 2007, the World Bank estimated that Brazil lost US\$ 2.7 billion of gross domestic product on health care for patients experiencing cardiac diseases, stroke, and diabetes^{1 2}. National stroke incidence was still unknown. Thrombolysis for stroke had been approved in Brazil since 2001 but few hospitals had sufficient training, structure and organization to implement it³. By mid 2008 only 35 hospitals offered thrombolytic treatment, which is minimal given Brazil's geographic size and population⁴.

Challenges to the implementation of acute stroke care in Brazil included overcrowded emergency rooms, low availability of intensive care unit beds, lack of physicians adequately trained to treat stroke, poor awareness of stroke symptoms in the population; and low availability of endovascular treatments in the majority of public hospitals⁵. Secondary prevention and rehabilitation services were limited and there was a significant lack of awareness of stroke, not only among the general population but also among health care professionals^{6 7}.

In 2008, the Brazilian Ministry of Health initiated the National Stroke Project to improve stroke care. This project included a taskforce of stroke neurologists, and it was these neurologists who established the Brazilian Stroke Network, a non-governmental organisation, with the purpose of improving education, assistance and research in stroke in Brazil.

Think about the following questions:

- Given the data and evidence about stroke and stroke care in Brazil, what do you think were the main focus areas for the National Stroke Project?
- The Brazilian Stroke Network was established by neurologists, who else did they need to connect with?

¹ Mansur AD, Favarato D. Mortality due to cardiovascular diseases in Brazil and in the metropolitan region of Sao Paulo: a 2011 update. *Arq Bras Cardiol* 2012; 99:755–61.

² Lopez AD, Mathers CD, Ezzati M, Jamison DT, Murray CJ. Global and regional burden of disease and risk factors, 2001: systematic analysis of population health data. *Lancet* 2006; 367:1747–57.

³ <http://www.redebrasilavc.org.br/sobre/>

⁴ Martins SCO, Pontes-Neto OM, Alves CV, et al. Past, Present, and Future of Stroke in Middle-Income Countries: The Brazilian Experience. *International Journal of Stroke*. 2013;8(SA100):106-111

⁵ Massaro AR. Stroke in Brazil: a South America perspective. *Int J Stroke* 2006; 1:113–5.

⁶ Lotufo PA. Stroke in Brazil: a neglected disease. *Sao Paulo Med J* 2005; 123:3–4.

⁷ Pontes-Neto OM, Silva GS, Feitosa MR et al. Stroke awareness in Brazil: alarming results in a community-based study. *Stroke* 2008; 39:292–6.