Stroke awareness in Brazil: what information about stroke is essential?

Conhecimento leigo sobre AVC no Brasil: que informação sobre AVC é essencial?

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Stroke has been the leading cause of death and functional incapacity for decades in Brazil, with a major impact on public health. Several factors may have contributed to this inconvenient reality: the delayed epidemiologic transition from infectious diseases to non-transmittable diseases in Brazil which occurred in the 1960s; ageing of the population and its multiethnic background; poor control of cerebrovascular risk factors; low availability to scientific proven treatments like intravenous thrombolysis and stroke units; low priority to stroke training for health care professionals; and poor awareness about stroke by the population.

After years of struggle and resilience by the Brazilian Cerebrovascular Diseases Society, the Brazilian Academy of Neurology, in 2012, the Brazilian Ministry of Health published the National Stroke Policy Act, finally setting the battle against stroke as a national priority. Since then, major steps have been gradually implemented to improve stroke care in the Country, including: reimbursement for stroke thrombolysis; improved financial incentives for stroke care within certified stroke units and stroke centers; training for healthcare professionals together with medical societies; establishment of the “Line of Stroke Care” which defined stroke as a priority for primary/secondary prevention, pre-hospital care, acute care and rehabilitation according to local demand and resources.

Lack of information about stroke within the population was alarming in Brazil. More recently some progress has been made. As a first step, the acronym “AVC” was adopted as the unified term to name stroke in the country. Stroke awareness campaigns around the “World Stroke Day”, No financial incentives of any sort come from this position. Received 23 September 2014 Accepted 30 September 2014

In this issue of Arquivos de Neuro-Psiquiatria, Panício et al. report an cross-sectional study that addressed the knowledge about stroke warning signs and therapeutic time window for stroke thrombolysis among patients with acute ischemic and hemorrhagic stroke admitted to the emergency department of a tertiary public hospital in Sao Paulo, Brazil. Although approximately two thirds of stroke patients showed some knowledge of stroke warning signs, only 7.8% patients were aware of the critical importance of early arrival for adequate stroke treatment. Interestingly, knowledge about stroke symptoms was not a predictor of early arrival in this hospital-based series. Instead, stroke severity was the only independent predictor to early hospital arrival, as previously reported in another study about hemorrhagic stroke in Sao Paulo city. The authors appropriately discuss that limited knowledge about the therapeutic time window for the treatment of acute ischemic stroke and lack of access to emergency medical services could be possible explanations for these findings. Alternative explanations may come from the small sample size of the study, a single-center design and from the local characteristics of its scenario. Indeed, the study may be unpowered to detect a
small effect of knowledge about stroke. Patients with
unknown time of onset of symptoms were included in the
main analyses, which also combined patients ischemic and
hemorrhagic stroke. After restricting the analyses to patients
with ischemic stroke and a known time of onset authors
report that the results have not changed substantially.
Nevertheless, further studies with larger sample sizes would
certainly be able to identify additional independent
predictors of early arrival. More concerning, patients with
prior stroke were not more likely to know about stroke signs
and symptoms.

Given the great variability of pre-hospital emergency
services and scenarios in Brazil, we cannot automatically
extrapolate these results to other cities of the country.

Nevertheless, this interesting study raises a very important
red flag: we still have a lot of work to do! Despite the fact that
education about stroke was included as a crucial element of
the National Stroke Policy Act, the number of health care
professionals with formal stroke training is still very restricted.
We also need to test and improve the efficacy and
effectiveness of our population-based stroke awareness
interventions. In parallel to improving health resources
(stroke units and stroke centers), more effective information
needs to be delivered to patients, their families and to first
responders, with major attention to the organization and flow
of the local stroke systems of care. That is the only way
towards the goal that every stroke patient has the information
he or she needs to get access to adequate stroke care.

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