

Editorial

Strengthening Neurotrauma Care in the Panamerican Region

In 2008, a group of public health researchers analyzed the neurotrauma burden in Latin America, using data from the 1996 Global Burden of Disease (GBD) study. With this analysis, a sound editorial regarding this issue was published in a Latin American public health journal. The editorial title was ‘Traumatic brain injury (TBI) in Latin America and the Caribbean: a call for research’. They highlighted there a special situation from a global perspective: ‘The burden of this often neglected injury disproportionately affects low and middle income countries (LMICs) which face not only a higher presence of risk factors for TBI but also have less developed health systems to deal with the associated health outcomes’.

Today, 23 years after the 1990 GBD study, we start to analyze data from the 2010 GBD study, and the situation remains the same and even worse. Additionally, few clinical studies in neurotrauma coming from this region have been performed since 1990. According to 2008 health data (used for the 2010 GBD study), in the Latin American region, injuries are associated to around 40% of the male deaths between 15 and 59 years old. In women, the burden is less, but as the country income decreases, female mortality due to injuries increases, almost to the same level as in men of same age range. If we analyze as an example, data from Colombia, Guatemala, El Salvador, Paraguay, Peru, or Venezuela, just to mention some countries, motorcycle accidents and violence-related injuries are one of the main issues as burden of disease locally. In countries where these injuries and deaths are analyzed more in depth, TBIs are in direct relationship with fatality of the events and TBI could be present in around 50% of the cases. In this context, it is clear that the Panamerican Region is one of the world regions, where TBIs have a huge impact as a public health problem. This disease affects the most economically active population, population that brings economical sustainability to the families in the region. In the same way, this region is one of the regions with less research in the neurotrauma field. Areas like Eastern Europe and South Asia, also with important burden of TBI, have been developing important research in neurotrauma.

Research is essential to develop health care systems and Latin America urgently requires the building of trauma and neurotrauma care systems as a simple social justice issue. Trauma is a disease of the human coexistence and the governments of the states of the region need to understand this basic concept: ‘humans in societies coexist... so due to that, the public health systems need to guarantee at least the infrastructure and trained personnel for the treatment of coexistence diseases’.

To have an idea of the actual panorama of neurotrauma research just in Colombia, in 2010 from 451 health research projects presented to the National Science and Technology Institute for government funding, only four were related to neurotrauma. Two of them were basic sciences-related. Most of the projects were related to infectious and chronic diseases. From near to 50 universities with health sciences programs, only three have research groups focusing on neurotrauma projects. The Panamerican Trauma Society have been devoted to promote this topic in the region, and because of this initiative, the journal is giving an important opportunity to disseminate the work of Latin American research groups interested in clinical and surgical trauma. In this new edition of the Panamerican Journal of Trauma, Critical Care and Emergency Surgery, two interesting articles from one of these research groups based in Cartagena City (Colombia) are presented. Some of these articles are centered in the understanding of current practice in the management of TBI, with two surveys. One directed to emergency medicine physicians and the other one, directed to neurosurgeons from the region. Not surprisingly most of the physicians know that recently updated guidelines exist, but most of them, explicitly answer that there are not protocols of care in the institutions where they work on daily basis. Heterogeneity in emergency care practice across centers and physicians in the Latin American region is very common. This point is extremely related with patient safety problems. As a quality improvement leader in trauma care, the Panamerican Trauma Society is promoting improvement in health practice, developing guidelines and protocols, which can be applied in real situations in low- and middle-income countries environments. Data coming from research in all these scenarios are fundamental in order to build tools and education resources for trauma quality improvement, having as a medium-term goal, to promote the developing of mature trauma care systems in the region.

This is an open invitation for health sciences leaders in the region to collaborate with these efforts and also on open call for health science students and professionals to develop new research projects in neurotrauma care. Unfortunately, we have several patients in the region, but fortunately we are building a new culture of quality improvement. We need to

take advantage of the problem situation to turn that reality into a better opportunity for the improvement in the outcome of our future patients. We are a unique society, where all specialties are invited to build better care systems. Welcome to all of you who are interested in improving neurotrauma care systems in the region. We and our fellow citizens deserve it.

Andres M Rubiano MD, PhD (c)
Neurotrauma and Critical Care Physician
Professor of Neuroscience, South Colombian University (Neiva/Colombia)
Director of Neurotrauma Research, El Bosque University/Meditech Foundation
Chair of Prehospital Care Committee, Panamerican Trauma Society