

## Early Stages of Global Neurosurgery

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The year 2015 was pivotal for the growth of global neurosurgery. In January, the United Nations (UN) adopted the Sustainable Development Goals (SDGs), replacing the expiring Millennial Development Goals. The SDGs were more comprehensive, having 17 Goals with 169 associated targets; a significant number of these included the necessity for surgical care to achieve the targets.<sup>1</sup>

In early Spring 2015, the publication of *Global Surgery 2030: evidence and solutions for achieving health, welfare, and economic development - The Lancet Commission on Global Surgery* created a paradigm shift in the understanding of surgical needs worldwide, particularly in access to safe, timely and affordable surgical care for billions of individuals and large gaps in global surgical health workforce.<sup>2</sup> At around the same time, *Disease Control Priorities* 3rd Edition, Volume 1, *Essential Surgery* laid out the economic case for surgical care, particularly in low resource settings.<sup>3</sup> In May, the 68<sup>th</sup> World Health Assembly unanimously approved WHA resolution 68.15 on strengthening emergency and essential surgical care as a component of universal health coverage.<sup>4</sup>

The adoption of SDGs and WHA 68.15 provided the political impetus toward making surgical care a global priority, DCP3 created the health economic basis for global surgical care, and the Lancet Commission developed the factual needs basis for greatly enlarging global surgical service delivery.

The World Health Organization (WHO) is the health technical arm of the UN. The WHA is composed of the health ministers of all UN Member States (countries) and is the governing body of WHO, setting the global health agenda and steering WHO's work. The WHO Emergency and Essential Surgical Care (EESC) Programme<sup>5</sup> was given the mandate to implement WHA resolution 68.15; a task that could only be achieved through extensive worldwide partnerships, such as the World Federation of Neurosurgical Societies (WFNS), which has official working relations as a non-state actor with WHO.<sup>6</sup>

On September 9-12, 2015, the 15<sup>th</sup> Interim Meeting of the World Federation of Neurosurgical Societies (WFNS) met in Rome, Italy.<sup>7</sup> For the first time, a neurosurgeon was the Lead of WHO EESC, creating a unique opportunity for optimally augmenting this WHO/WFNS partnership going forward. The Foundation for International Education in Neurosurgery (FIENS) held a session during this meeting, further highlighting future prospects.

In December 2015, WHO EESC convened the 6<sup>th</sup> Biennial and 10th-anniversary meeting of the Global Initiative for Emergency and Essential Surgical Care at WHO headquarters in Geneva, Switzerland, to outline a roadmap and timeline to implementing WHA resolution 68.15.<sup>8</sup> Of approximately 100 individuals in attendance, 7 were neurosurgeons: Drs A Rubiano, I Chudzicka-Strugala, M Levivier, AL Kwan, G Rousseau, K Park, and W Johnson. Further discussions were held on highlighting global neurosurgery and bringing neurosurgical service delivery and training into worldwide attention.

**WHO Global Initiative for Emergency and Essential Surgical Care  
6<sup>th</sup> Biennial and 10<sup>th</sup> Anniversary Meeting**

**14-15 December, 2015  
WHO HQ  
Geneva, Switzerland**



***Emergency and Essential Surgical Care  
Services Organization and Clinical Interventions Unit  
Service Delivery and Safety Department  
World Health Organization***

**Image 1:** WHO Global Initiative for Emergency and Essential Surgical Care, December 2015  
One year following, the International Conference on Recent Advancement in Neurosurgery (ICRAN) was held in Bogotá, Colombia with a special session on Global Neurosurgery.<sup>9</sup> A consensus document was developed, which stressed the unmet burden of disease: 5 Billion people lack access to safe, timely, and affordable surgical care, most of which is in low- and middle-income countries (LMICs); only 11.8% of neurosurgical demand is being met, with an additional 1.3 million procedures needed each year; the neurosurgical workforce is currently, at

best 5% of the recommended number of 1 neurosurgeon per 100,000 population; and only 42% of African and 75% of Latin American countries offer in-country training of neurosurgeons. This Bogotá Declaration<sup>10</sup> further affirmed that the inherent responsibility for providing neurosurgical care to all who need it lies with the global community of neurosurgeons, declaring “Global Neurosurgery as a collective and unified effort in improving all aspects of neurosurgical care whenever and wherever it is needed.” A ceremony was held in which this document was given to Dr. W Johnson of WHO.



**Image 2:** Dr. Kee Park presenting the Bogotá Declaration to Dr. Walt Johnson

This important declaration brought attention to all neurosurgeons (and others) that Global Neurosurgery was a discipline that must promote enlarged access to care for all that need it, expand service delivery through strengthening the health system, and increase training opportunities, particularly in LMIC countries. An additional mandate of this discipline is acquiring the requisite data to make a compelling case for improving neurosurgical service delivery and training worldwide.

The impact of this declaration is far-reaching, including, among many things, an increased presence of neurosurgeons in most discussions and international meetings on global surgery, greatly increased academic output of global neurosurgical topics, greatly strengthened partnerships with WHO through the WHO/WFNS Liaison Committee, a Lancet Commission on Stroke in the Developing World, increased activity in global traumatic brain and spine injury work, as well as significantly amplified interest in global neurosurgery within the medical student and resident/registrars community.

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