Child neurology: role of the International Association

In the last decade, child neurology has made remarkable advances, particularly in the fields of molecular neurobiology and neuroimaging diagnostic techniques. These advances are continuing at a rapid and ever-accelerating pace. Now communication technology allows the scientific community to interact quickly and easily. An effective way for child neurologists to keep up-to-date is to become a member of a scientific society and attend annual scientific meetings where new ideas are discussed. There are at present regional and continental child neurology societies almost everywhere in the world. Why then does the International Child Neurology Association (ICNA) exist in such an interconnected and globalized world? What is its role, its contribution, its importance?

ICNA is such a special organization because it is the only association where different cultures from every part of the world are integrated to develop an international perspective at a very high level, allowing members to gain a global view of child neurology.

The organization was born from the desire to achieve a great mission: to improve the quality of care for children affected by neurological diseases, to encourage high training qualifications for child neurologists, and to promote research and international cooperation.

In the last 30 years, a number of different strategies have been adopted to promote education, primarily in areas of the world where the largest populations of children are found coupled with a lack of trained child neurologists. Since 1982, ICNA has offered a series of monographs, the International Review of Child Neurology book series (now published by Mac Keith Press), covering a broad range of topics which aim to present the best in child neurology, wherever that may be found. This has been a unique experience which has differentiated ICNA from all regional societies, allowing the association to spread education worldwide, benefiting especially those countries that were under-served. More recently, a travelling faculty of senior trainers organized educational programmes and training modules in developing countries, with the aim to foster education by addressing neurological issues and topics appropriate to the geographic context.

Recent advances in technology, in the field of molecular neurobiology and the genomic revolution, are greatly increasing our capacity to identify causes of neurological disorders and prevent and treat neurological disabilities in children. These advances are currently applied with great effectiveness in developed countries, but they have not been used yet for the benefit of the much larger number of children in emerging countries. ICNA is well positioned to remedy this deficit by reducing the gap and upgrading the level of child neurology practice all around the world.²

I feel the most relevant function of an international society is to favour the circulation of scientific ideas, particularly in countries where our specialty is still emerging and where physicians are not exposed to the benefits of regional societies. ICNA has a unique role in improving international cooperation and promoting clinical and scientific research by providing a medium through which physicians can exchange opinions at an international level for the advancement of paediatric neurosciences. Since its foundation, the society's scientific nature found its most direct expression in the organization of the ICNA international congress, held in different geographical areas every four years. These congresses are often the place where advances in child neurology are first recorded, but their value is not solely scientific. Our meetings, which attract delegates from most continents, are also social events which express the importance we give to being members of the same group and to the feeling of belonging to a unique international community.

This is, in my view, an incredibly exciting time to be a child neurologist. Our discipline is young and rapidly expanding. The growing field of child neurology will include the care of children with neurodevelopmental disabilities as well as disorders of high cognitive functions. Furthermore, as child psychiatry has returned to experimental and evidence-based medicine, the divide between child psychiatry and child neurology will be progressively closed.³ Advances in the characterization of behavioural phenotypes and neuropsychiatric manifestations of neurological diseases complement progress in understanding the molecular biology of these disorders, allowing a gradual recognition of the genotype-proteotype-phenotype relationships. In the near future, a molecular neuropsychiatry is likely to have diagnostic implications and eventually may lead to novel and rational therapies. Such a great expansion in the field will present new fascinating challenges which, to be met, require a joint international effort that will lead to even greater achievement in the clinical care of children with neurological disorders. ICNA, with its international network of highly qualified child neurologists, is well equipped to meet the challenges set by the 21st century, and can play an important role in launching international multicentre studies and worldwide research, as well as lead a global campaign for prevention of both the causes and consequences of cerebral damage.

Paolo Curatolo President of ICNA

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