Annual Report of the ILAE Pediatric Commission 2018

Chair: Stéphane Auvin

The commission's work is mainly oriented by the operations of 4 Task Forces. A description of the 2018 activities of the pediatric commission and all related TFs is found below.

The ILAE pediatric commission has been actively involved in the discussion and the work of the nosology TF for the definition of the epilepsy syndromes (Elissa Yozawit, Jo Wilmshurst, Stéphane Auvin). The commission has also been interacting with the regulatory affairs TF about the clinical trials in infants (Stéphane Auvin). A common work between the pediatric commission and the regulatory affairs TF has resulted in a draft of a new protocol for randomized control trials for focal onset seizure in infants (Abstract submitted for the Bangkok IEC 2019 and Session proposal submitted for the Geneva ECE 2020, Stéphane Auvin)

Two publications from the ILAE Pediatric commission went out during 2018: one from the comorbidities TF and one from the research advocacy TF. These two pieces of work are the results of the activities initiated during the previous term.

- Auvin S, Wirrell E, Donald KA, Berl M, Hartmann H, Valente KD, Van Bogaert P, Cross JH, Osawa M, Kanemura H, Aihara M, Guerreiro MM, Samia P, Vinayan KP, Smith ML, Carmant L, Kerr M, Hermann B, Dunn D, Wilmshurst JM. Systematic review of the screening, diagnosis, and management of ADHD in children with epilepsy. Consensus paper of the Task Force on Comorbidities of the ILAE Pediatric Commission. Epilepsia. 201;59:1867-1880.
- Wilmshurst JM, Guekht A, Secco M, Helen Cross J, Perucca E; Advocacy Task Force, Commission of Pediatrics, International League Against Epilepsy. Advocacy for children with epilepsy: Leveraging the WHA resolution. Advocacy Task Force, Commission of Pediatrics, International League Against Epilepsy. Epilepsia Open. 2018;3:167-174.

The report of each TF is written below:

1. Neonatal seizure Task Force (co-chairs: Ronit Pressler & Hans Hartmann)

The ILAE's Pediatric Commission set up a task force to update the guidelines on neonatal seizures, which were published jointly by the WHO and the ILAE in 2012. Seizures affect at least 2 / 1000 neonates. They often are signs of a severe acute health problem but also significantly contribute to morbidity and mortality of both term and preterm neonates. As of today, only very few high quality studies have addressed optimal diagnosis and treatment of neonatal seizures.

Having finished the literature search, the taskforce organized a workshop at the 2018 European Epilepsy Congress, aiming to kick off a critical appraisal of the evidence. This workshop was followed by an open meeting bringing together pediatricans, epileptologists

and neonatologists. Prof Linda de Vries from Utrecht (NL) gave an overview on the management of neonatal seizures highlighting the need for international guidelines. This was followed by Prof Jo Wilmshurst from Cape Town (SA) talking on the principles of guideline development and specific considerations for neonatal seizures. Dr Ronit Pressler from London (UK) and Dr Hans Hartmann from Hannover (GER) gave an update on the current guideline development. The need for further research in the field was further highlighted by case presentations and discussions given by Prof Martha Feucht from Vienna (AUT) and Prof Stéphane Auvin from Paris (FRA).

Work on the evidence profiles continues and following completion of the systematic literature review, the taskforce aims to draft the guidelines in 2019.

2. Medical Therapy Task Force (chair: Lieven Lagae)

The major aim of the Medical Therapy task force is to publish at least one paper with a view on current treatment options in young children (<4 years old), based on (1) available literature data and on (2) current practice. It is clear that there is little literature and that most treatments are prescribed off-label. We will work with typical case scenarios illustrating some common situations in young children presenting with epilepsy. For all scenarios, we will try to identify first, second and third line (medical) treatment options, so covering both first line treatments and treatment options when the child becomes drug-resistant.

During 2018, we identified the following scenarios: 1. A 14 month old child with recurrent typical febrile seizures; 2. A 6 month old child with typical epileptic spasms; 3. An 18 month child with Dravet syndrome ('epileptic encephalopathy); 4. A 2 year old child with tuberous sclerosis (structural epilepsy, cortical 'dysplasia'); 5. A 9 month old child with cerebral palsy after hypoxic ischemic encephalopathy (lesional epilepsy).

The ongoing work consists of 2 processes: 1. Literature review, based on RCT and large case series, for the epilepsy treatments in these 5 scenarios. 2. Survey amongst pediatric neurologists/epileptologists (based on real life clinical stories) (Ongoing in 2019). A survey will be sent around to pediatric epileptologists in all continents with specific questions concerning their first line treatment in these 5 scenarios. Also, we will ask what second and third line options are in these specific situations.

3. Research Advocacy Task Force (Chair: Pauline Samia)

The research advocacy task force members remained in regular email contact during 2018 with discussions regarding the most impactful contribution the group could potentially make during its term. A task force meeting was held in August 2018 during the Vienna ECE then again in November 2018 on the sidelines of the ICNC in Mumbai. The conclusion of these meetings was that the task force would conduct a systematic review on research in the epilepsy field in Africa with a particular interest on the trends in research related to the clinical features, comorbidities and management of Epilepsy in Children in Sub-Saharan Africa.

The group aims at completing the proposal before March 2019 in compliance with PROSPERO and PRISMA guidelines. Descriptions of etiology shall follow those outlined by ILAE. The team intends to search databases including medline; Embase; Global Health and

CAB abstract databases and World Health Organization Library database (WHOLIS) to identify publications.

The aim of this research project is to provide a publication that delineates the current state of epilepsy research in Africa and to identify gaps that should be addressed by future research in the region and to understand the barriers to moving research forward in the region. It is also envisaged that findings from this study would support advocacy efforts to promote epilepsy research in this area.

The task force is planning a PET1 course for health care workers on the sidelines of the fourth African Epilepsy congress in Kampala Uganda in August 2019. Taskforce members are also planning a research workshop targeting young researchers to encourage more publications from the region by enhancing knowledge and providing mentorship.

4. Joint Task Force with the Psychiatric commission (Co-chairs: Kette Valente – Colin Reily)

The Task Force on Psychiatric Issues on Pediatric Epilepsy, chaired by Kette Valente and Colin Reilly, represents a liaison between the Psychiatry (Mike Kerr) and the Pediatric Commission (Stephane Auvin).

After a 8-hour meeting held in Vienna, the Task Force has developed two proposals, as detailed below:

- 1. A consensus statement on the clinical assessment and treatment of neuropsychiatric conditions in pediatric epilepsy. This work is ongoing and with the support of the Guideline Task Force of the ILAE (Process to be initiate first month of 2019).
- 2. A Clinical Practice Guideline (CPG) for the diagnosis and treatment of psychogenic non-epileptic seizures in children. This work is ongoing with the final status of the methodology being discussed with the Guideline Task Force of the ILAE (Under submission to ILAE the guidelines TF).