with regular in-house simulation training involving multiple specialities.

The presence of parents in this study also had a significant negative impact on communication, including decision to stop resuscitation and performing call-outs. Human factor training should focus on dealing with this aspect during resuscitation, along with finding ways to establish clear leadership, and for leaders to be able to empower passive followers within the team.

British Association for Paediatric Nephrology

705

CALCINEURIN INHIBITORS IN NEPHROTIC SYNDROME SECONDARY TO PODOCYTE GENE MUTATIONS: A SYSTEMATIC LITERATURE REVIEW

¹Georgia Malakasioti, ²Daniela Iancu, ³Kjell Tullus. ¹Renal Unit, P. and A. Kyriakou Children's Hospital, Athens, Greece; ²Wessex Clinical Genetics Service, Princess Anne Hospital, Southampton, UK; ³Department of Pediatric Nephrology, Great Ormond Street Hospital NHS Foundation Trust, London, UK

10.1136/archdischild-2021-rcpch.153

Background International Pediatric Nephrology Association (IPNA) recommends the use of a calcineurin inhibitor (CNI) as first line immunosuppressive therapy for steroid resistant nephrotic syndrome (SRNS) with response rates up to 50%. Response to CNI carries a strong predictive value for long term renal survival in these patients. However, their use in children with SRNS secondary to podocyte gene mutations (representing 10–30% of all SRNS cases) is controversial due to the significantly lower response rates compared to non-genetic disease. Nevertheless, there are several reports in the literature of CNI-induced remission in monogenic SRNS.

Objectives We systematically reviewed publications on monogenic SRNS treated with a CNI to determine: (1) CNI response rate; (2) impact of response on renal outcome; and (3) clinical and molecular predictors of response.

Methods PubMed was searched for English language publications providing clinical and genetic data of patients with CNI-treated monogenic SRNS. Variant pathogenicity was assessed according to American College of Medical Genetics criteria and patients were assigned to 1 of 4 categories based on estimated genotype contribution to phenotype: (1) non-existing; (2) unknown; (3) possible; or (4) confirmed contribution. Cases with non-existing phenotype-to-genotype contribution were excluded. Subgroup analysis was performed for the possible and confirmed genetic cases in order to eliminate bias from inclusion of non-truly genetic (presumably of immune aetiology) patients.

Results Data of 187 SRNS cases (of unknown, possible or confirmed genetic basis) from 22 studies were analyzed; 35.4% responded (7.3% fully and 28.1% partially) to CNI with commonest biopsy patterns being minimal change disease in full responders and focal segmental glomerulosclerosis in partial and non-responders ($P = 0.001$). Corticosteroids were more frequently co-administered with CNI in responders compared to non-responders ($P = 0.002$). Full and partial responders had the lowest risk for progression to end-stage kidney disease (ESKD) compared to non-responders (HR [95%CI] 0.4 [0.2–0.8]; $P < 0.05$). Carriers of WT1 variants were most likely to remit under CNI versus any other mutation (OR [95%CI] 4.7 [2.0–11.3]; $P = 0.001$). Subgroup analysis

including only possible or confirmed genetic cases ($n = 123$) yielded similar CNI response rate (35.7%), lowered risk for ESKD in responders (HR [95%CI] 0.3 [0.2–0.8]; $P < 0.05$) and WT1-associated favorable response profile (OR [95% CI] 5.3 [2.0–14.4]; $P = 0.001$).

Conclusions The current IPNA recommendation that all children with SRNS should be trialed with a CNI allows assessment of treatment response even in cases later established as genetic. WT1 variant carrier status might predict a favourable response. Genetic FSGS patients are least likely to benefit from CNI therapy. At present, and until larger scale studies are available, decision on CNI continuation in responsive monogenic SRNS needs to be made on a case-by-case basis.

International Child Health Group

708

DEVELOPMENT OF A PARTNERSHIP TO IMPROVE PALLIATIVE CARE SERVICES FOR CHILDREN IN THE GAMBIA

¹Deborah Shanks, ¹Julia Downing, ¹Malcolm Macrae, ²Mansur Sowe, ¹Dermot Gorman, ³Jainaba Sey-Sawo, ⁴Lamin Makalo, ¹Liz Grant. ¹Global Health Academy, University of Edinburgh; ²Ministry of Health, The Gambia; ³University of The Gambia Nursing Department; ⁴Paediatric Association of The Gambia

10.1136/archdischild-2021-rcpch.154

Background Paediatric palliative care services in LMIC countries compete for resources with many other priorities. Their provision is desirable and includes advocacy, training health and community care workers, policy development and mentorship.

Objectives The THET J&J start-up grants provided an ideal opportunity to establish a partnership with the Ministry of Health (MoH). The long term aim being to develop children's palliative care services in The Gambia. A needs assessment was carried out in early 2020. We hope reporting the results raises awareness of the gaps and possible solutions in LMIC.

Methods The study took the form of a cross-sectional design with a focus on estimating the need for CPC and gaps at the country level. A mixed methods approach utilising both quantitative and qualitative data was used. Both primary and secondary data sources were used. The estimation of the need for CPC was based on estimation techniques using the prevalence and mortality of the specific diseases known to require palliative care. The response to the need and existing gaps were analysed using interviews and focus groups with key persons as well as survey data from service providers.

Ethical approval for this study was given by the University of the Gambia, School of Medicine. Reference number R020 004

Results Five organisations completed a Capacity Self-Assessment Tool, 17 staff from 5 facilities were interviewed and 2 Focus Group Discussions were conducted (8 staff). The leading cause of death in children was heart disease, then lower respiratory infections and neonatal disorders, with HIV/AIDS being 5th, Tuberculosis 7th and cancer 9th. Under 5 mortality is 47.8 per 1,000 live births. It was not possible to estimate prevalence. Facility capacity assessment to provide CPC ranged from 23%–74%.

Themes identified were a need to improve diagnostic ability; a desire for training; improve access and utilisation of medicines; and provide support for families. Training in