Children (KABC-II) measured the mental processing index (MPI) and the Plus-EF executive function tablet-based tool. Physical function combined grip strength, broad jump and the 20m shuttle run test to produce a total physical score (TPS). A detailed caregiver questionnaire was performed in parallel. Results 80 Zimbabwean children with mean (SD) age 7.6 (0.2) years had mean height-for-age (HAZ) and weight-for-age Zscores (WAZ) of -0.63 (0.81) and -0.55 (0.85), respectively. For growth measures, LMI and total skinfold thicknesses were highly related to both WAZ and BMI Z-score, but not to HAZ. For physical function, TPS was associated with unit rises in HAZ (1.29, 95% CI 0.75, 1.82, p<0.001), and LMI (0.50, 95% CI 0.16, 0.83, p=0.004), but not skinfold thicknesses. Cognition measurements demonstrated internal consistency. No child outcomes were associated with socioeconomic status, nurturing, discipline, food and water insecurity, or household adversity.

Conclusion We found clear associations between growth, height-adjusted lean mass and physical function, but not cognitive function, in a cohort of Zimbabwean children. The SAHARAN toolbox could be deployed to characterise schoolage growth, development and function in sub-Saharan Africa and evaluate public health interventions. This is currently being applied to the SHINE cluster randomised trial to evaluate the long-term impact of the trial's water and sanitation and nutrition interventions. Future work also aims to perform a factor analysis to provide field-ready and simple metrics examining school-age growth and function.

1145

## IMPROVING POSTNATAL BREASTFEEDING SUPPORT FOR MOTHERS OF LOW-BIRTH-WEIGHT INFANTS IN RURAL KENYAN HOSPITALS- A FEASIBILITY STUDY

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10.1136/archdischild-2022-rcpch.539

Aims To assess the feasibility and acceptability of using trained peer mothers to deliver breastfeeding support to mothers of low-birth-weight (LBW, <2500g) infants in healthcare facilities in rural, western Kenya.

Methods The study was conducted in Homa Bay County. Seventeen peer mothers attended a 4-day training programme that focussed on communication skills, breastfeeding support, Kangaroo Mother Care, hygiene and identification of danger signs. Competency-based scenarios were used to select the 10 (59%) peer mothers, who delivered the interventions to the mother-LBW infant pairs (<28 post-delivery) across 8 health-care facilities in Homa Bay County. A mixed methods approach was employed using structured observations and post-intervention semi-structured interviews with mothers, healthcare providers and peer mothers. Descriptive statistics were used to analyse the quantitative data. A thematic framework was used to analyse the qualitative data.

Results From September-November 2021, 23 mother-LBW infant pairs (3 sets of twins so 26 infants) were recruited and received the intervention. The median maternal age was 25 years (Interquartile range, IQR 22, 29) and all infants were born in hospital. The median age of the infants was 1 day (IQR 1,3), median birth weight 2100g (IQR 1900, 2260) and

median gestation was 34 weeks (IQR 34,36). Although all the mothers who received the intervention looked well, worryingly 4 (17%) showed no signs for bonding with the infant. Peer mothers consistently explored mothers' wellbeing (25, 100%), positioning on the breast (21, 87%) and supported mothers with expressing breast milk but were less consistent with supporting and observing infant breast attachment (15, 63%) and suckling (13, 54%) during feeds. Only one infant was noted to be too weak to suckle and was referred to the health care providers. Key themes from the interviews were the promotion of resilience in infant feeding decision making among mothers, against community misconceptions of practices such as expressing breast milk; and the enhancement of positive interactions between mothers, peer mothers and health care providers in the context of healthcare facility restrictions on visitors due to COVID-19 and staff shortages. Insufficient breastmilk was a recurrent theme sometimes attributed to poor maternal diet.

Conclusion Facility-based breastfeeding peer support for mothers of LBW infants has the potential to improve uptake of appropriate infant feeding practices and their post-discharge survival and growth outcomes in rural communities in Kenya. These preliminary data, including the observed implementation challenges will be used to inform the design of a future trial to rigorously evaluate this potentially sustainable approach to addressing adverse post discharge outcomes of these vulnerable infants.

1178

## MOVING TOGETHER TOWARDS A NEW REVISION OF THE GRIFFITHS SCALES OF CHILD DEVELOPMENT

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10.1136/archdischild-2022-rcpch.540

Aims Community-based collaborative systems are demonstrated as being as important as child health professionals in providing the early identification of, and intervention for children, especially those with developmental challenges. One of the clinician's core responsibility areas is to assess children using psychometrically sound measures and to ensure that the findings are interpreted and used in a fair and ethical way. The Griffiths Scales of Child Development - 3rd Edition (Griffiths III) was published in 2016 and is used internationally by practitioners. The Griffiths III is used to improve childhood development outcomes, one of the millennium development goals. This places it firmly on the global health agenda. The Association for Research in Infant and Child Development (ARICD) is currently planning and reviewing, refining, and improving the next version of this assessment tool. Part of this process is to obtain ongoing feedback from all the key role players in the Griffiths III. The purpose of the present study was to explore and describe how practitioners using the Griffiths III around the world experienced the measure 18 months after its 2016 publication.

Methods A qualitative methodology with an exploratory-descriptive design was employed. A questionnaire was created by the ARICD and distributed to the 217 registered practitioners of the Griffiths III at that time. 175 questionnaires were returned to the ARICD from 12 countries. The 72 questionnaires from practitioners actively using the Griffiths III were evaluated using thematic analysis to extract themes.

Results The results of the study revealed four overarching themes of interest to the practitioners, namely 1) the purpose and use of the Griffiths Scales of Child Development; 2) domains, content, and structure of the Griffiths Scales of Child Development; 3) the psychometric properties, standardisation, and norms of the Griffiths Scales of Child Development; and 4) the merits, limitations, and improvements of the Griffiths Scales of Child Development. Based on the findings of this study, recommendations were made that can be used in the next revision of the Griffiths Scales of Child Development. These recommendations relate to psychometric properties, a specialised version for children with an autism spectrum disorder, school readiness elements, universality of the scales, administration time, diagnosis and screening, cost, specific items, and report writing.

Conclusion It is not sufficient simply to have an experience in order to learn. Without reflecting upon this experience, it may quickly be forgotten, or its learning potential lost. It is from the feelings and thoughts emerging from this reflection that generalisations or concepts can be generated, and it is generalisations that allow new situations to be tackled effectively Gibbs (1988). By creating a continuous feedback mechanism with practitioners around the world, a place for meaningful interdisciplinary reflection and collaboration is created and in so doing serves to advance the scope, quality and use of the test.

### **REFERENCES**

- Gibbs, G. (1988). Learning by Doing: A Guide to Teaching and Learning Methods. Further Education Unit. Oxford Polytechnic: Oxford.
- Le Roux, J (2020). The Experience's of Users of the Griffiths III. Unpublished Masters Treatise. Nelson Mandela University, Port Elizabeth, South Africa.

# 1252

# NEURODEVELOPMENTAL OUTCOMES IN PRETERM BABIES IN DUBAI-UAE, A FEASIBILITY STUDY

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10.1136/archdischild-2022-rcpch.541

Aims • The assessment of neurodevelopmental outcomes in preterm babies at the corrected gestational age of two years.

• To introduce and explore the feasibility of the use of Parent Report of Children's Abilities-Revised (PARCA-R) as standard tool for the first time in the region.

Methods A standardised questionnaire, PARCA-R was used to assess language and non-verbal cognitive development. PARCA-R (in english) was emailed to parents. Two follow-up phone calls were made to each parent(s). Parents of 24 preterm infants born in Mediclinic City Hospital, Dubai, United Arab Emirates (UAE) have responded. Additional neonatal data on was collected. This included birthweight, administration of antenatal steroids and/or magnesium sulfate, multiple pregnancies, intraventricular haemorrhage and chorioamnionitis.

Results Over one-third of the sample had at least one form of either language or non-verbal cognitive developmental delay. Four children had both forms of delay, three had non-verbal cognitive delay only, and two had language development delay only. There were more females with one or both forms of delay. The two-tailed Fischer Chi-square test was used, but no variables studied were statistically significant.

Conclusion About 30% of preterm born children encounter a variable degree of delay at the age of two years.

The study has provided data on language and non-verbal cognitive outcomes for the first time in UAE and the region.

We recommend PARCA-R as a cost-effective time saving supplement to Dubai Health Authority's developmental screening program, Baraem.<sup>2</sup>

#### **REFERENCES**

- Johnson S, Bountziouka V, Brocklehurst P, et al. Standardisation of the Parent Report of Children's Abilities-Revised (PARCA-R): a norm-referenced assessment of cognitive and language development at age 2 years. Lancet Child Adolesc Health. 2019; 3: 705-712. doi:10.1016/S2352-4642(19)30189-0
- Dubai Health Authority. Baraem Dubai Tool for Developmental Screening. [Online]. Available from: https://www.youtube.com/watch?v=B\_zokqP0rw4

1312

TENDENCY OF MORBIMORTALITY FROM ACUTE INFECTIOUS RESPIRATORY DISEASES IN CHILDREN THAN ONE YEAR IN BRAZIL BEFORE AND DURING THE PANDEMIC PERIOD OF COVID-19

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10.1136/archdischild-2022-rcpch.542

Aims This study aims to draw a profile regarding the main causes of hospitalization for respiratory diseases in children under one year between the years 2016 and 2021, in Brazil, to identify possible temporal and age-related patterns of patients linked to the hospitalizations analyzed, to evaluate the possible differences between the hospitalization patterns of individuals younger than 01 year due to respiratory diseases, and to assess whether there was a change in the pattern of hospitalizations of individuals under one year of age due to respiratory causes from the beginning of 2020, in the context of the COVID-19 pandemic.

Methods This is an ecological study of time series, based on the analysis of public domain data obtained from the Informatic Department of the Unified Health System (DATASUS) platform and from the DATASUS pages related to Live Birth Information System (SINASC), and analyzed from of two programs, namely: TabWin<sup>TM</sup> and Microsoft Power BI<sup>TM</sup>. Finally, the data was analyzed in Microsoft Power BI. The study universe included hospital admissions in the Unified Health System (SUS) throughout the Brazilian territory, between the years 2016-2021, in which patients were individuals younger than 01 (one) year and focusing on the cause of hospitalization being of respiratory origin. The International Classification of Diseases (ICD-10) was used to do the analysis regarding the classification of diseases. The analyzed variables were the patient's age, the patient's age group, the patient's race/color, the patient's sex, the cause of hospitalization (from ICD-10 onwards), the day of admission,

Results It was observed a reduction in hospitalizations for respiratory diseases from March 2020, the beginning of the COVID-19 pandemic, with hospitalizations for other causes remaining without major changes between 2016-2021 (figure 1). There was no significant variation over the years analyzed regarding the profile of hospitalized patients, analyzing age group, sex, and race/color. However, even though the number of hospitalizations decreased there was a proportional increase in the number of deaths (figure 2).