Department of Paediatrics and Child Health Research Day

BEST ABSTRACTS
Socioeconomic Factors and Distance from Treating Centre Do Not Predict Survival In South African Children With Neuroblastoma

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Introduction: Optimal management of neuroblastoma depends on accurate risk stratification at time of diagnosis. Many low-and-middle-income countries lack access to the specific genetic tests used globally for this purpose.

Objectives: This study aimed to determine whether socioeconomic factors predicted prognosis in neuroblastoma and so provide alternative measures for risk stratification in resource-constrained settings.

Methods: This retrospective record review included 145 patients with biopsy-proven neuroblastoma between 1 January 2000 and 31 December 2018. Records were obtained from the three main paediatric oncology units in Johannesburg: Charlotte Maxeke Johannesburg Academic Hospital, Chris Hani Baragwanath Academic Hospital and Wits Donald Gordon Medical Centre. Kaplan-Meier survival analysis was performed in relation to biological and socioeconomic factors, which included serum ferritin and lactate dehydrogenase (LDH), age, stage, parental employment status, nationality and distance of residence from treating facility. Cox proportional hazards regression analysis determined the significance of prognostic factors in both univariate and multivariate models.

Results: Factors with a significant effect on survival were age below 18 months (p=0.030), lower stage (p<0.001) and serum LDH level <750U/L (p=0.041). None of the socioeconomic factors observed had a significant effect on survival (mother employed p=0.215, father employed p=0.125, South African nationality p=0.563). The association between distance from treating facility and stage at diagnosis was not significant (Kendall tau-b coefficient 0.108, p=0.060).

Conclusion: Socioeconomic factors did not prove to be significantly associated with neuroblastoma survival in this study. Age, stage and LDH level did, however, suggesting that tumour biology exerts an overriding influence on prognosis in neuroblastoma.

COMPLEMENTARY FEEDING PRACTICES AND THE GROWTH STATUS OF CHILDREN AGED 6-23 MONTHS IN SOWETO

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Introduction: Even if children have been optimally breastfed in the first six months of life, not receiving adequate complementary feeding can lead to poor growth.

Objectives: To determine the associations between caregiver Complementary Feeding practices and the growth status of their children aged 6-23 months.

Methods: This is a descriptive, cross-sectional study with analytical components, and included 168 primary caregiver-child pairs attending well-baby visits at a clinic in Soweto. Data collected included child anthropometric measures, socio demographic and complementary feeding practices information.

Results: The study found a Minimum Meal Frequency (MMF) of 91%, a Minimum Dietary Diversity with seven food groups (MDD-7) and a Minimum Dietary Diversity with eight food groups (MDD-8) of 56% and 48% respectively and a Minimum Acceptable Diet with seven food groups (MAD-7) and Minimal Acceptable Diet with eight food groups (MAD-8) of 54% and 42% respectively. The growth status of the study sample was 13% wasted when considering the Mid-Upper Arm Circumference (MUAC) and Weight-for-length Z-score (WLZ) together; 3% underweight; 11.3% stunted; 17% overweight and 3% obese. The Infant and Young Child Feeding (IYCF) indicators were not significantly associated with the growth outcomes of this study sample of children.

Conclusions: The findings highlight the lack of diversity in the diets of young children in this study setting and mirrors the rest of South Africa with their low breastfeeding rates and early cessation of breastfeeding. The high prevalence of overweight children in this study is particularly concerning, and highlights a need for intervention. The intake of unhealthy foods needs to be closely monitored and assessed in future studies for associations with growth outcomes. Although the IYCF indicators had no significant associations with the growth outcomes in this study, they remain valuable as a broad evaluation of a child’s diet and to establish trends within a community.
The experience of caregivers and patients during the COVID-19 pandemic attending the Paediatric Nephrology Clinic at the Chris Hani Baragwanath Academic Hospital

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Introduction: Healthcare services have been disrupted and livelihoods changed due to the COVID-19 pandemic. The paediatric nephrology clinic implemented policies to limit the impact of the pandemic on patients and health care workers.

Objectives: The aim of this report is to describe the experiences of patients and their caregivers who attended the nephrology clinic during the first 6-months of the pandemic.

Methods: A descriptive study using a questionnaire and a telephonic interview. Caregivers of patients scheduled for out-patient appointments during the period 26 March to 30 September 2020 were identified as potential participants.

Results: Of the 420 participants identified, 293 (70%) were not contactable (voicemail/no answer/invalid contact numbers), 114 (27%) were enrolled, 12 (2.8%) declined and one (0.2%) withdrew. Three patient deaths were noted in the 420 potential participants, two of the caregivers declined the interview and one withdrew. Of those interviewed, 47 (41%) had appointments rescheduled, 29 (26%) attended the clinic, 38 (33%) pending visits. Out of all participants interviewed, 93 (82%) were satisfied with the overall service received with 99 (87%) reporting good communication and education. Of those who attended, 20 (69%) felt vulnerable, 16 (80%) reported a positive experience after clinic attendance. Seventy-six (67%) of the participants receive a social grant, with acquisition not disrupted during the period. Thirty-three (29%) do not receive a grant; the commonest reasons were: 9 (27%) employed caregiver, 6 (18%) not South African citizens, 6 (18%) never applied. Seventy-seven (32%) of the participants were employed, with 18 (16%) participants reported job losses during the study period. COVID-19 testing were reported in 36 patients, with 34 negative results, two unknown. Three participants had tested positive themselves. Participant reported patient outcomes were: 105 (92%) well, 8 (7%) did not comment, 1 (1%) unwell.

Conclusions: Caregivers reported a positive experience overall. The inability to contact patients on telephone numbers supplied is a limitation of this study and it is postulated that telehealth may not be a viable option in this population. The reasons for this should be explored in future studies.