



Magnitude of underweight among children with Cerebral Palsy in Dar Es Salaam, Tanzania: Using Cerebral Palsy Specific Growth Charts

Lamiyah Alimohamed^{1,2}, Victoria Ndembo^{1,2}, Edward Kija^{1,2}

1. Muhimbili University of Health and Allied Sciences, 2. Muhimbili National Hospital



INTRODUCTION

Cerebral palsy is the most common neurological problem in children, affecting 2-2.5 per 1000 child globally. Higher rates are found in South Africa reported as 10 per 1000 child. Growth pattern in children with cerebral palsy is different from the general population, and they often present with comorbidities.

MAIN OBJECTIVE

The main objective of this study was to determine the proportion of underweight in children with CP attending Paediatric Neurology clinic in Dar Es Salaam, Tanzania.

MATERIALS AND METHODS

A prospective hospital-based cross-sectional study was conducted among children with cerebral palsy at a national referral hospital in Dar Es Salaam, Tanzania attending a Paediatric Neurology clinic. Demographic data, clinical examination and anthropometry were obtained using a structured questionnaire designed for this study. The anthropometric measurements which were analysed using specific CP percentile charts.

CONCLUSIONS

Underweight is common in children with CP in Tanzania occurring in one third of the affected children. Children with Functional classification level V are mostly affected

REFERENCES

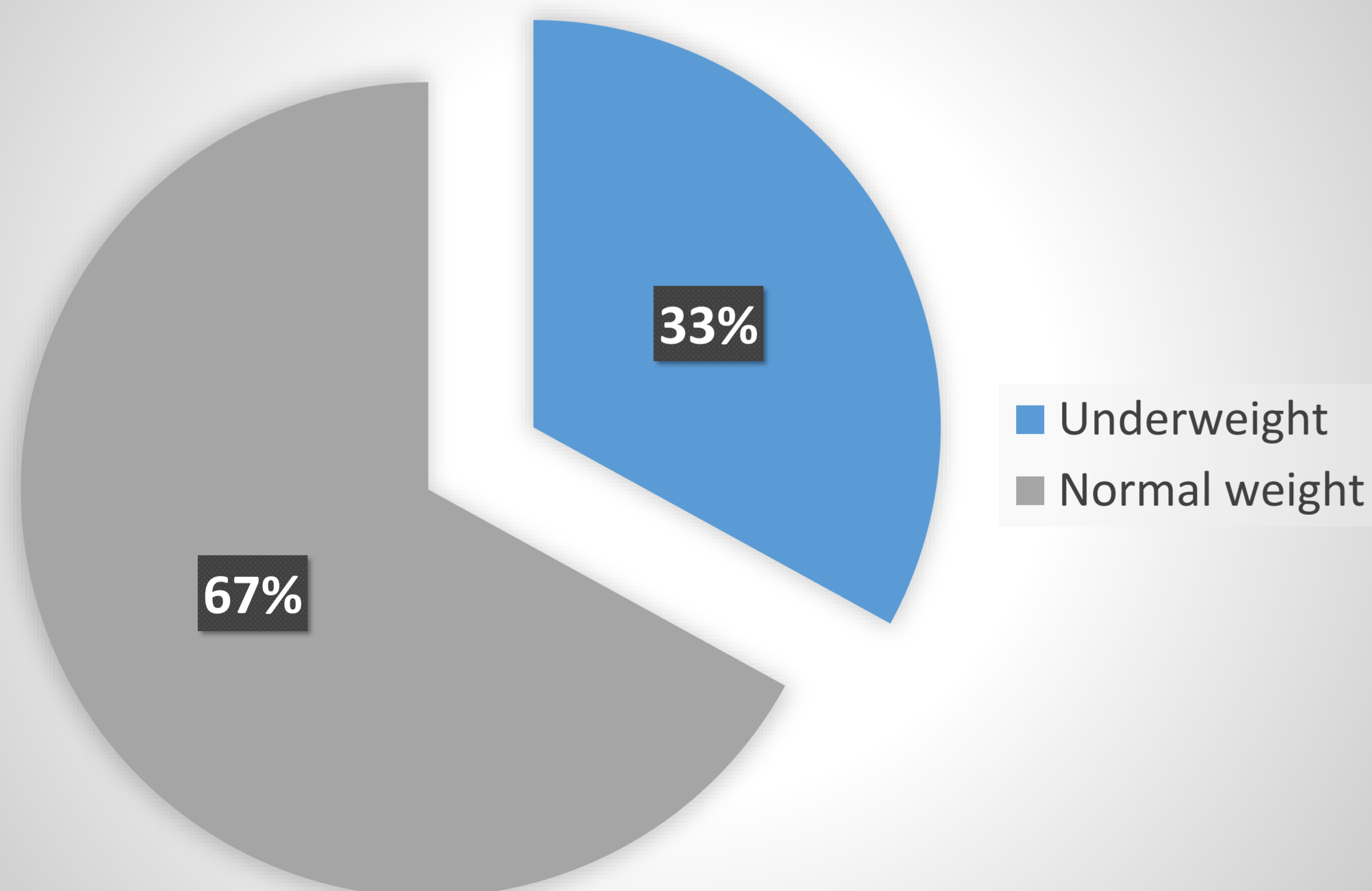
1. Johnson A, Gambrah-Sampanye C, Khurana E, Baier J, Baranov E, Monokwane B, et al. Risk Factors for Malnutrition Among Children With Cerebral Palsy in Botswana. *Pediatr Neurol.* 2017 May 1;70:50–5.
2. Aggarwal, Srishti and Chadha, Ravinder and Pathak R. Nutritional status and growth in children with cerebral palsy: A review. *Int J Med Sci Public Heal.* 2015;4:737--44
3. Jahan I, Muhit M, Al Imam MH, Ghose R, Chhetri AB, Badawi N, et al. Nutritional status of children with cerebral palsy in gorkha, nepal: Findings from the nepal cerebral palsy register. *Nutrients.* 2021 Aug 1;13(8).
4. Hung J-W, Hsu T-J, Wu P-C, Leong C-P. Risk Factors of Undernutrition in Children with Spastic Cerebral Palsy. Vol. 26, *Chang Gung Med J.* 2003.

RESULTS

In this study 300 children were recruited, 164 (55%) were aged 2-4 years. Out of these, the majority were males, accounting for 196 (65%) of the total sample. Among all the children, 33% were identified as underweight. Underweight were noted in 78(36%) of children with Spastic CP compared to 14 (31%) of children with Dyskinetic CP (p=0.006).

Underweight was observed more in children with level V of all functional classification systems, Gross Motor Function Classification System (GMFCS) 65(44%), Manual Ability Classification System (MACS) 30(37%), Communication Function Classification System (CFCS) and 36(53%) and Eating and Drinking Ability Classification System (EDACS) 33(52%), p-value 0.001.

Nutrition status %



CONTACT

edwardkija@gmail.com