



# Communication Challenges in children with Cerebral Palsy in Dar Es Salaam, Tanzania

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## Introduction

Cerebral Palsy (CP) is the most common cause of childhood disability affecting around 2-2.5 per 1000 children globally.

Physical disability can cause dysarthria which limits intangible speech affecting communication. This puts them at risk of acquiring a passive role in communication impairing them from expressing themselves effectively

## Objective

To determine communication challenges among children with cerebral palsy attending Muhimbili National Hospital, Dar Es Salaam, Tanzania.

## Methods

A prospective descriptive hospital-based study was conducted at a tertiary national referral hospital in Dar Es Salaam, Tanzania

A structured caregiver interview was used to assess communication. We used the Communication Function Classification System (CFCS) to determine the severity of the receptive and expressive communication in children 2 years and older. The comorbidities and physiological type of CP was accessed by clinical examination.

## Results

Physiological Type	CFCS Level N (%)		P-value
	I-III	IV-V	
Spastic	82(37.6)	136 (62.4)	0.001
Dyskinetic	12 (26.1)	34 (73.9)	
Ataxic	27 (96.4)	1 (3.6)	
Mixed	6 (75.0)	2 (25.0)	

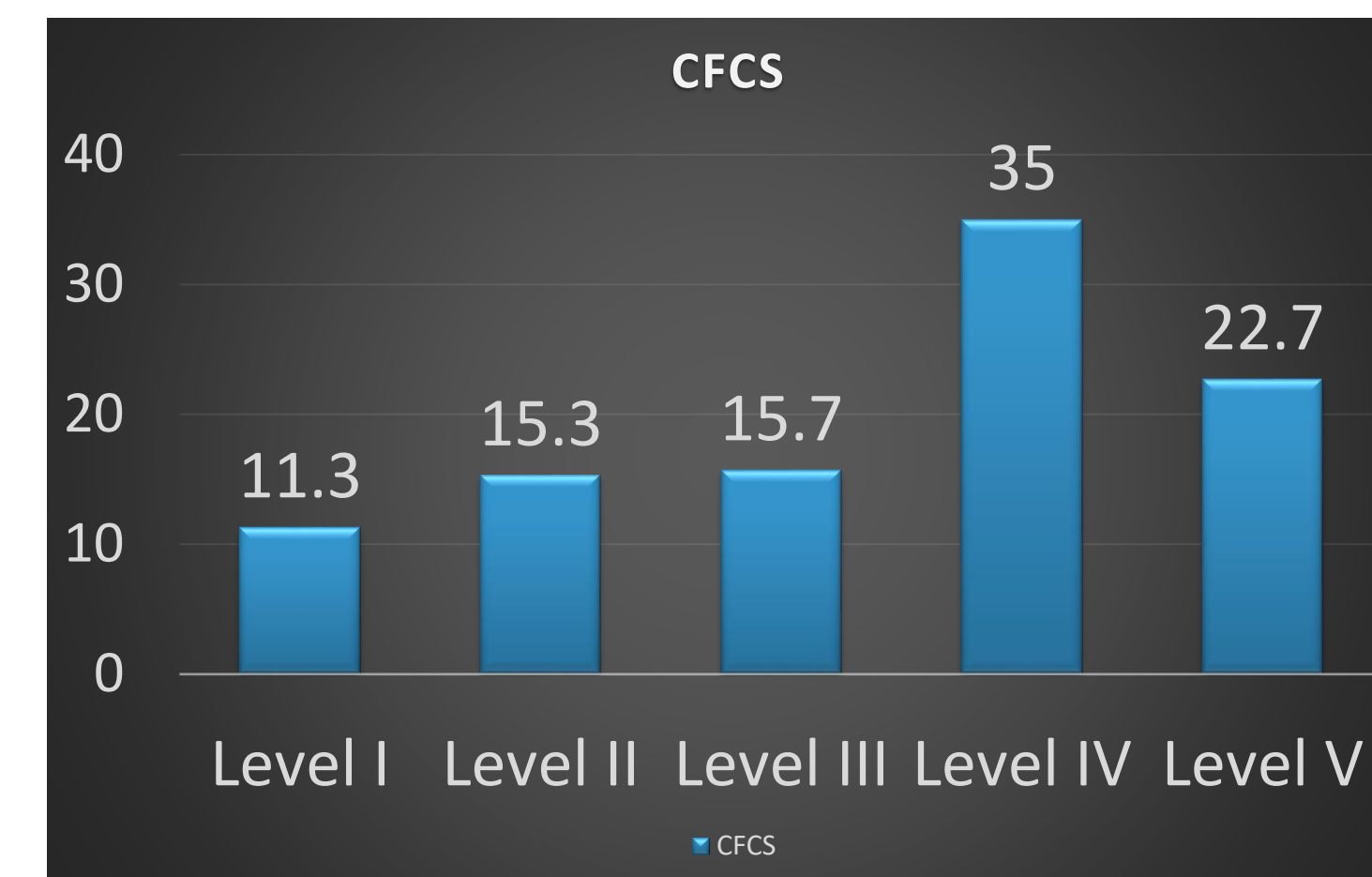
## Univariable and Multivariable Analysis of the factors associated with the CFCS

	Category	Univariable analysis			Multivariable analysis		
		cOR	95% CI	P - value	aOR	95% CI	P - value
Type of CP	Dyskinetic	1.71	0.84 – 3.49	0.141	1.98	0.92 – 4.29	0.082
	Mixed	0.20	0.04 – 1.02	0.053	0.20	0.04 – 1.05	0.057
	Ataxic	0.02	0.003 – 0.17	< 0.001	0.03	0.003 – 0.19	< 0.001
	Spastic	1 <sup>a</sup>					
Vision impairment	Yes	2.47	1.25 – 4.86	0.009	2.06	0.95 – 4.45	0.067
	No	1 <sup>a</sup>					
Hearing impairment	Yes	3.35	1.10 – 10.21	0.033	1.81	0.49 – 6.72	0.374
	No	1 <sup>a</sup>					
Speech impairment	Yes	2.98	1.83 – 4.85	< 0.001	2.82	1.64 – 4.85	< 0.001
	No	1 <sup>a</sup>					

Key: cOR: crude Odds Ratio

aOR: adjusted Odds Ratio

1<sup>a</sup>: Reference category



## CONCLUSIONS

Communication impairment is common in children with CP especially children with Spastic CP and Functional level IV-V are mostly affected hence assessment of communication should be done routinely in all children with CP, to provide early intervention.

## Reference

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