

Nutritional Status of Young Children in Misungwi District

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Introduction

- Poor nutritional status is associated with increased morbidity and mortality in children under five years old (U5s)
- Misungwi District, rural Tanzania has some of the country's worst U5 health indicators
- Baseline needs assessment conducted prior to maternal newborn child health (MNCH) initiative in Misungwi District
- Objective: describe U5 anthropometrics and feeding practices pre-intervention, and determine relevant associations



Methods

- MNCH-focused household coverage survey (HHS)
 - Standardized questions administered by trained research assistants
 - Cluster-sampled selection of household heads and women 15-49 years old
- U5s weighed, measured and 24-hour dietary intake recorded
- Data entered into tablet-computers and managed in 'R' software
- Descriptive analysis using international standard growth charts and dietary practice definitions
- Logistic regression determined associations between dietary practices and
 - Anthropometrics
 - Characteristics
 - Facility care-seeking
- Interclass cluster correlation coefficients accounted for cluster effects

Results

- Anthropometrics obtained from n=1586 U5s living in 1977 households from HHS conducted Sept-Oct 2016

Indicator	Definition	Result
U5 Underweight	Moderate and Severe (-2SD)	16%
	Severe (-3SD)	5%
U5 wasted	Moderate and Severe (-2SD)	6%
	Severe (-3SD)	2%
U5 stunted	Moderate and Severe (-2SD)	30%
	Severe (-3SD)	11%

Table 1. U5 underweight, wasted and stunted in Misungwi District based on baseline household coverage survey conducted in 2016

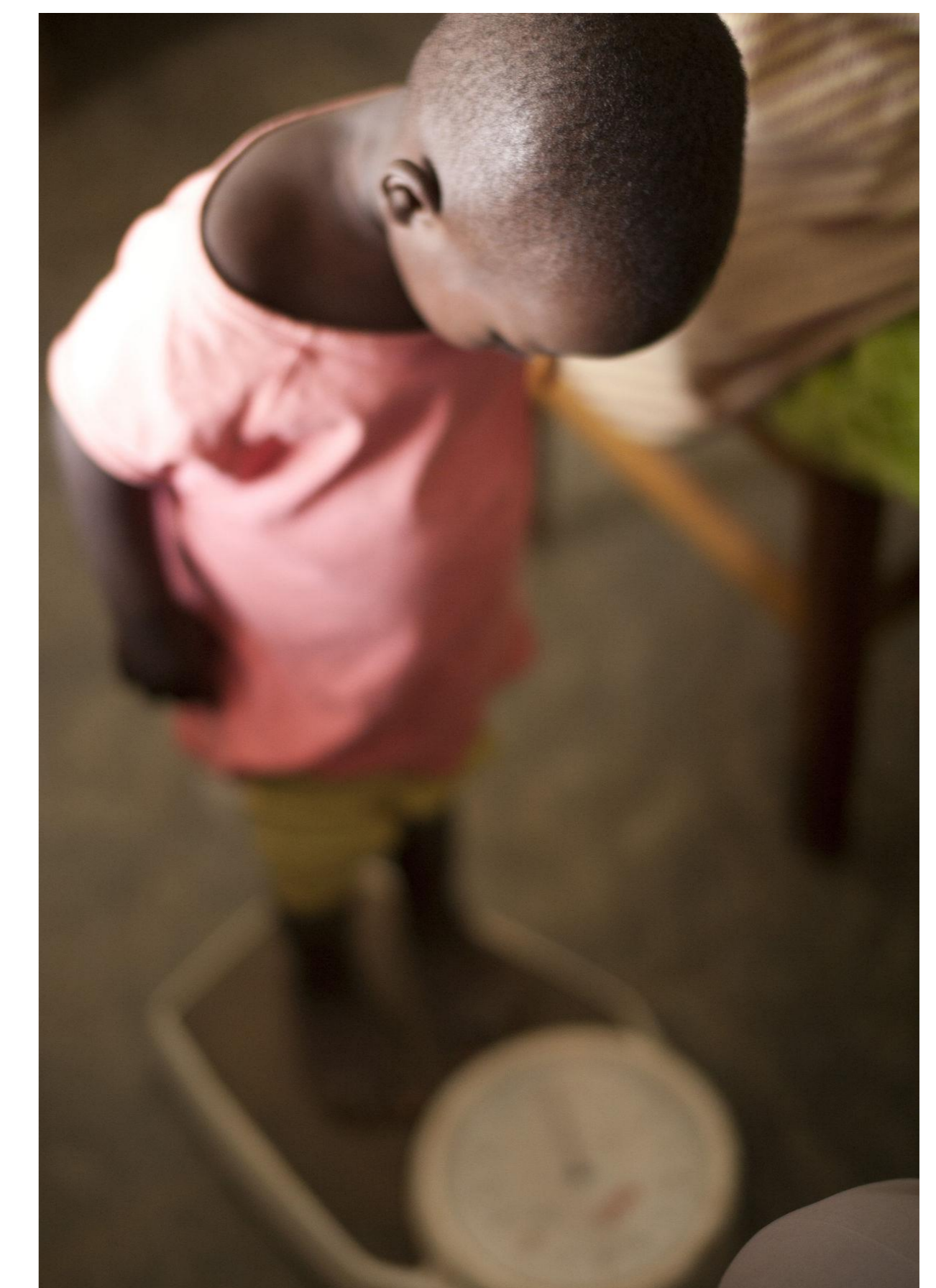
Indicator	Result	
	Numerator/ denominator	Percentage
Exclusive breastfeeding (<6 months)	133/264	50%
Early initiation of breastfeeding (within 1h)	164/1007	16%
Early initiation of breastfeeding (within 24h)	886/1007	88%
Minimum dietary diversity	102/820	12%
Minimum meal frequency	216/782	28%
Minimum acceptable diet	32/782	4%

Table 2. U5 feeding practices in Misungwi District based on baseline HHS in 2016

- Underweight and stunting were less common:
 - Among women who attended antenatal care (ANC) 4+ times (OR = 0.7 and 0.7 for underweight and stunting respectively)
 - With health centre deliveries compared to home births (OR= 0.6 and 0.8 for underweight and stunting respectively)
- Underweight and wasting were inversely related to wealth quintiles:
 - Underweight and wasting were less common in the highest quintile compared to the lowest quintile (OR = 0.6 and 0.4 for underweight and wasting respectively)

Discussion

- High rates of poor nutrition in Misungwi, contributing to U5 morbidity
- MNCH intervention should improve breastfeeding and feeding practices
 - Education needed at household level on early initiation of breastfeeding, exclusive breastfeeding and appropriate weaning practices
- Also need to consider relevant associations that may contribute to poor nutrition and advocate for:
 - ANC 4+ times
 - Health centre deliveries
- Inverse association between poor nutrition and wealth quintiles



References

- Government of Tanzania (2016). The national road map strategic plan to improve reproductive, maternal, newborn, child & adolescent health in Tanzania (2016-2020): One plan II. Dar es salaam United Republic of Tanzania Ministry of Health, Community Development, Gender and Elderly.
- Mama na Mtoto Project Baseline Report (2016)

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