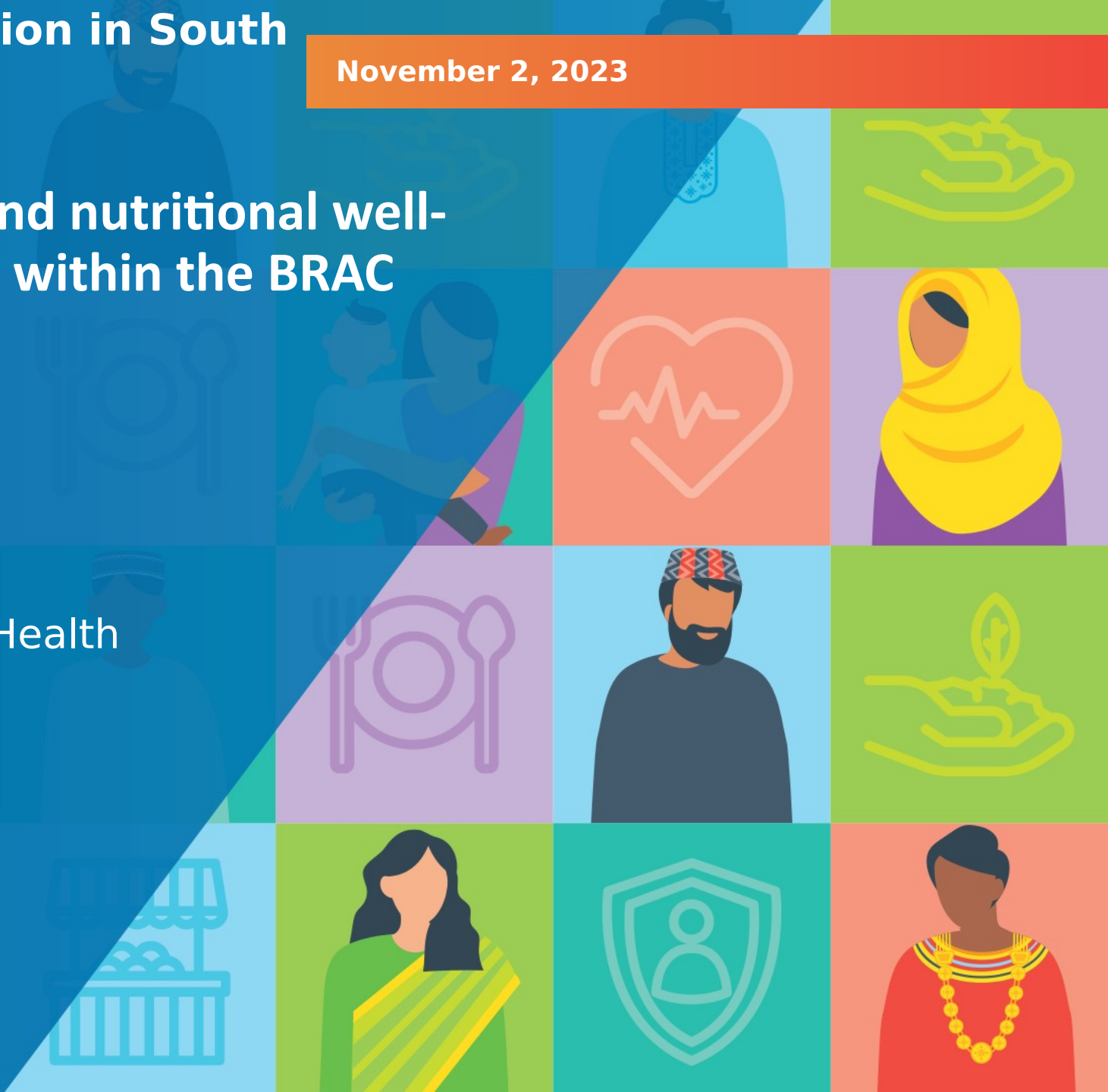


Evaluation of feeding practices and nutritional well-being among under-five children within the BRAC Health program regions

Saira Parveen Jolly
BRAC James P grant School of Public Health
BRAC University



Evaluation of feeding practices and nutritional well-being among under-five children within the BRAC Health program regions

Overview of BRAC

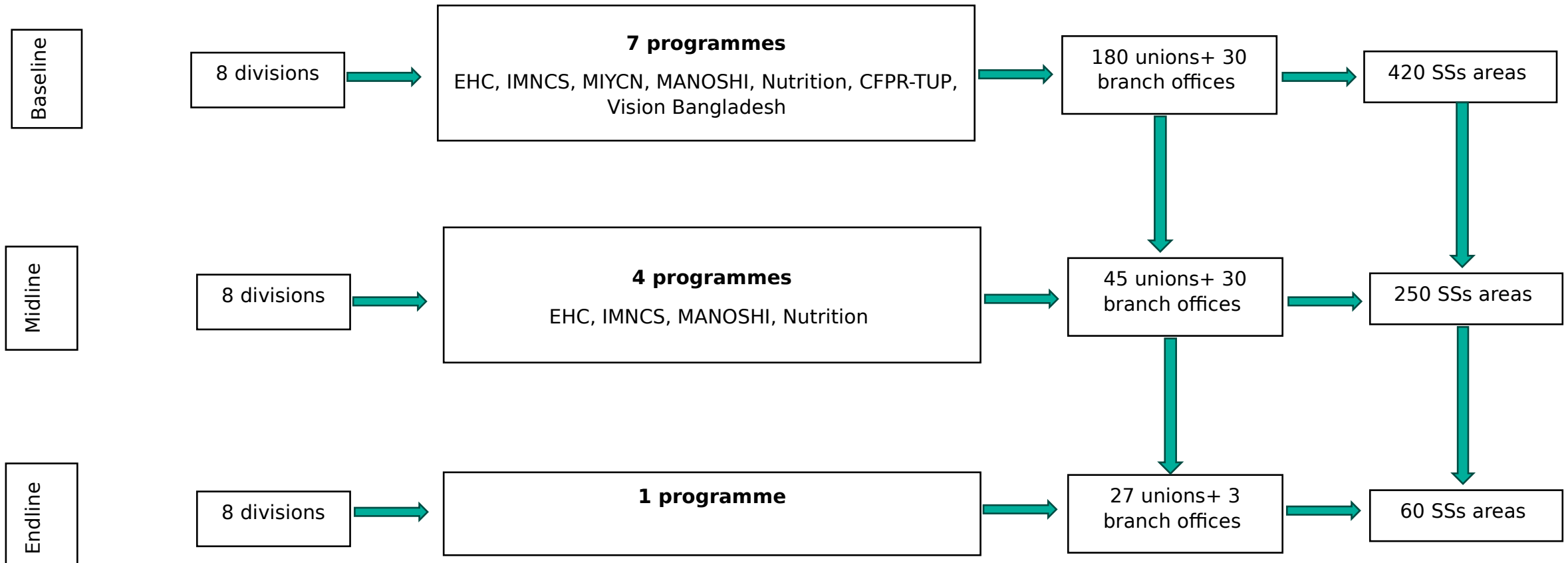
- BRAC is the largest Non-governmental organization in the world
- Through BRAC flagship. BRAC health, nutrition and population programme (HNPP), has come up with comprehensive healthcare package to the vulnerable population of the country
- BRAC HNPP provided its services through its seven programmes. Those were BRAC Essential healthcare (EHC) programme, improving maternal neonatal and child survival (IMNCS) project, Maternal Infant and Young Child Nutrition (MIYCN), Manoshi, BRAC Nutrition Intervention, Challenging the Frontiers of Poverty Reduction Targeting Ultra Poor (CFPR TUP) and Vision Bangladesh
- BRAC provides its door-to-door services through its frontline community health workers (CHWs) namely BRAC Shahthya Kormi (SK) and BRAC Shasthya Sebika (SS)
- In 2015, BRAC HNPP realigned its log frame indicators with Sustainable Development Goals (SDGs)-2 and 3 with eight outcome indicators. Infant and young child feeding (IYCF) practices is one of the indicators

Rationale

- In recent years, the South-East Asia region has faced a series of crises, including climate disasters, economic shocks, COVID-19, and conflicts which have led to higher food and fuel prices and disruptions in crucial nutrition systems, affecting families' access to essential services
- In the meantime, BRAC underwent a transformation, shifting from a philanthropic organization to a social enterprise. It embraced a unified approach with consistent intervention packages designed for both rural and urban areas. The COVID-19 pandemic disrupted the standard operations of BRAC's intervention packages, which are typically delivered to the beneficiaries' doorsteps by CHWs
- It remains essential to assess the program for potential improvements and adaptations. To achieve this, benchmark, midline, and endline surveys were conducted to evaluate all indicators, including the nutritional status of under-five children

Methodology

- Repeated cross-sectional surveys
- Benchmark, midline and endline surveys conducted in 2015, 2018 and 2021 respectively
- Multistage cluster random sampling



Methodology

- Three categories of mothers were interviewed

	Categories	Benchmark	Midline	Endline
a	Mothers with a child aged 0-5 months	1550	1228	551
b	Mothers with a child aged 6-23 months	4989	1366	541
c	Mothers with a child aged 24-59 months	4445		535

- Digital by women

tors proposed
naire

Methodology

- IYCF indicators
 - 0-5 months: Exclusive breastfeeding for age of 0-5 months
 - 6-8 months: Breastfeeding+2 times meal/day+4 food groups
 - 9-23 months: Breastfeeding+3 times meal/day+4 food groups
 - 6-23 months Non-breastfed: 2 times non-breast milk +3 times meal/day+ 4 food groups
 - Minimum acceptable diet: minimum meal frequency+ 4 food groups
- Height/length and weight of the children were measured
- Nutritional status of the children was expressed as height-for-age Z score (HAZ), Weight-for-age z score (WAZ), and Weight-for-height Z score (WHZ)
- Stunting, underweight and wasting identified as HAZ, WAZ and WHZ below -2.00SD
- Chi-square test; One-way ANOVA
- Data was analyzed by SPSS-24

Results: Changes in socio-demographic and nutritional status of the respondents

Mean age of the respondents increased significantly from baseline to endline (24 vs 24 vs 26 yrs; $p < 0.001$)

Proportion of mothers with age of < 19 years reduced significantly (16% vs 18% vs. 10%; $p < 0.001$)

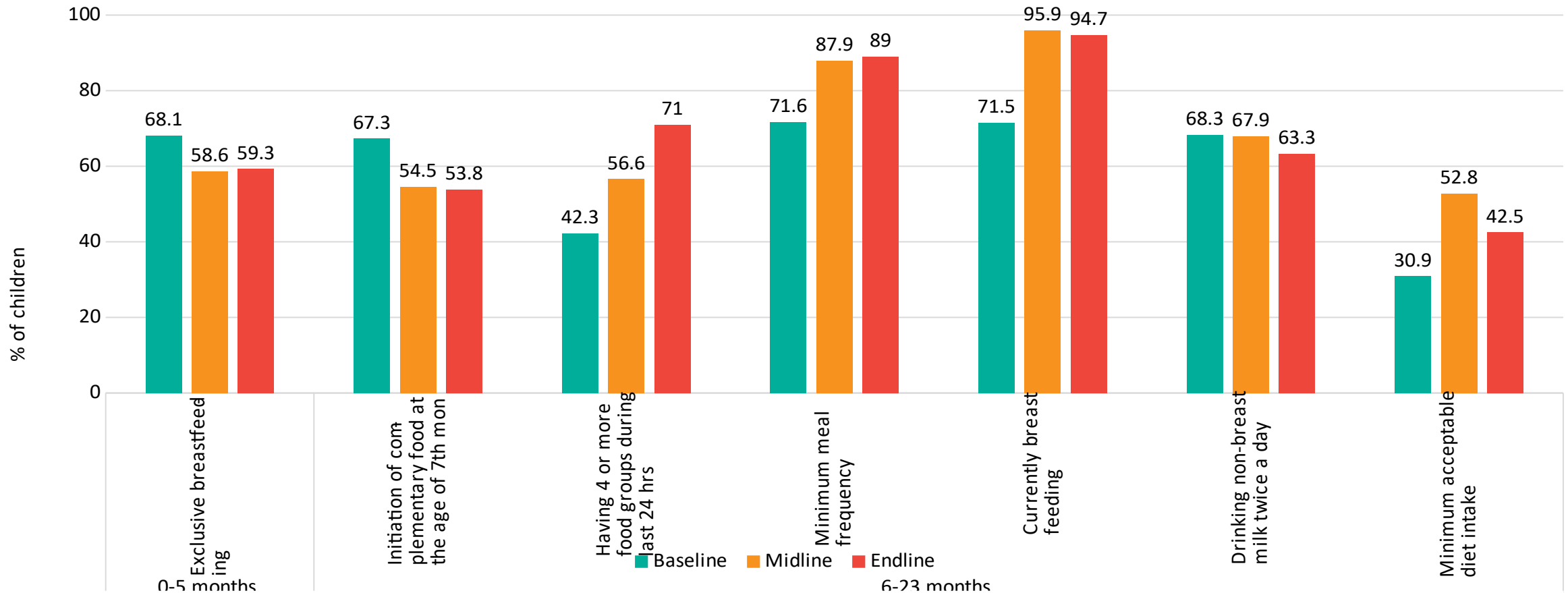
Proportion of mothers with primary school completed, secondary uncompleted and secondary or more increased significantly from baseline to endline ($p < 0.001$)

Minimum dietary diversity of women increased significantly from midline to endline (64% to 69%)

Proportion of women with overweight (14% vs 22.5% vs 22%) and obesity (2.3% vs 4.6% vs 6.9) increased significantly from baseline to endline ($p < 0.001$)

Results

Fig: Changes in infant and young child feeding practice from 2015 to 2021 in BRAC programme areas



** Denominators are different for each components

Fig: Changes in prevalence of stunting among under-five children

Fig: Changes in HAZ of under-two children from baseline to endline

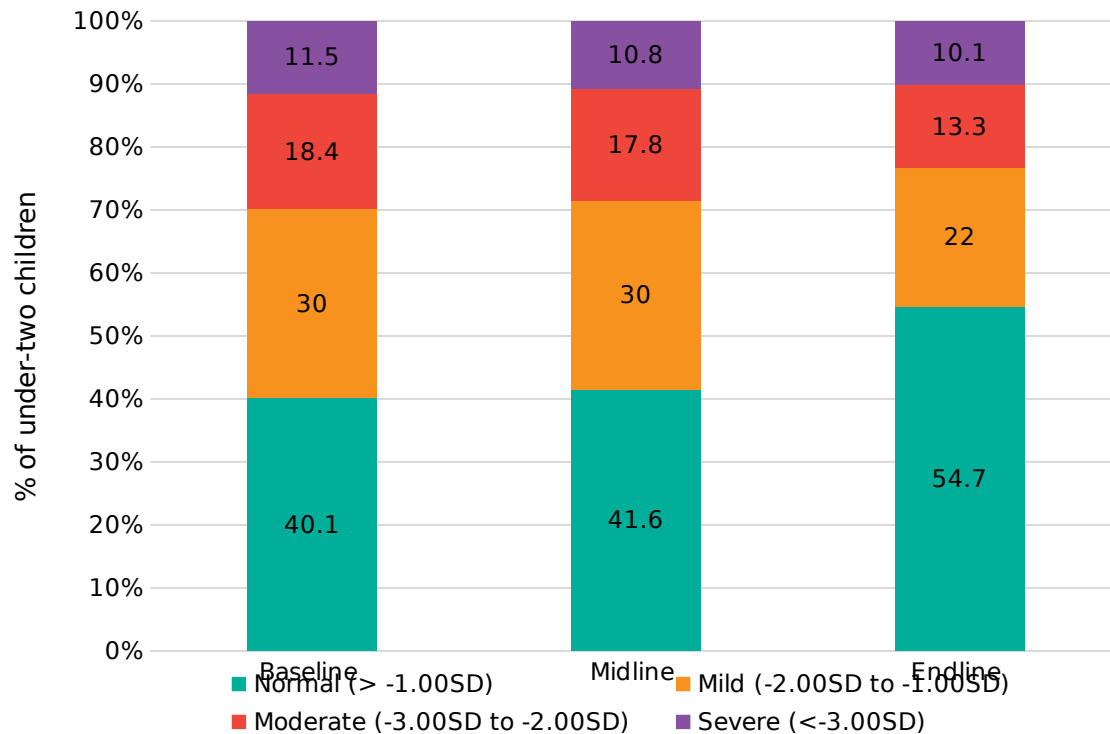


Fig: Changes in HAZ of under-five children from baseline to endline

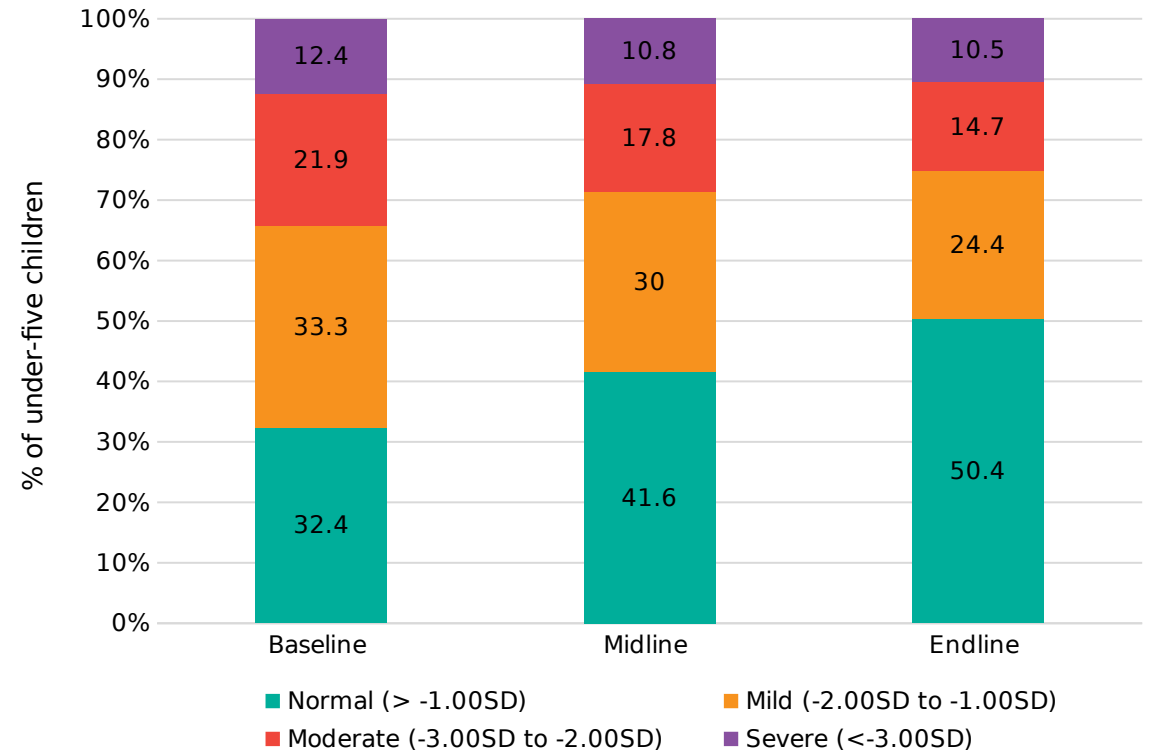


Figure: Changes in prevalence of underweight among under-five children from baseline to endline

Fig: Changes in WAZ among under-two children from Baseline to Endline

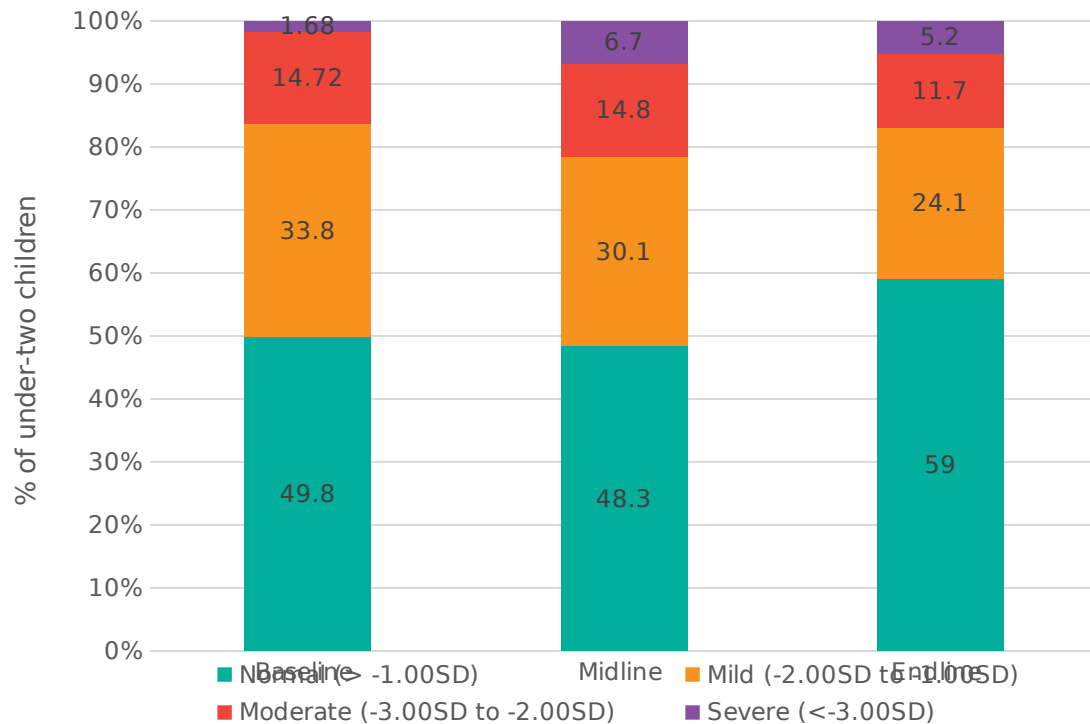


Fig: Changes in WAZ of under-five children from Baseline to Endline

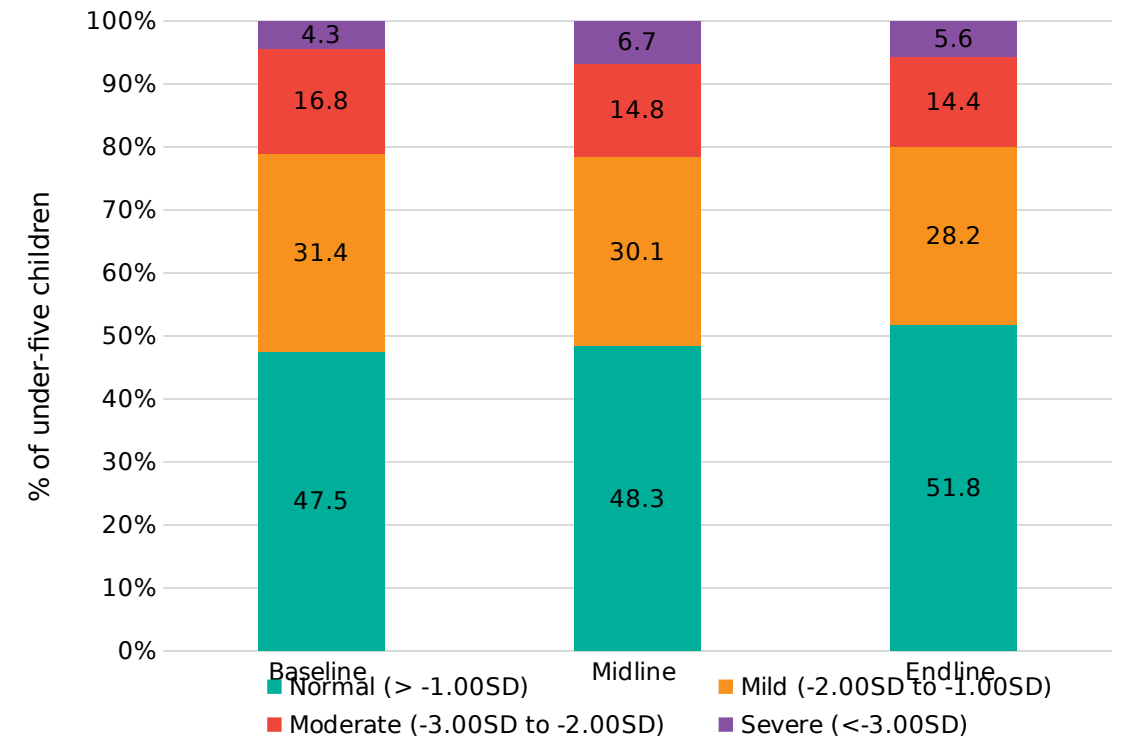


Figure: Changes in prevalence of wasting among under-five children from baseline to endline

Fig: Changes in wasting of under-two children from baseline to endline

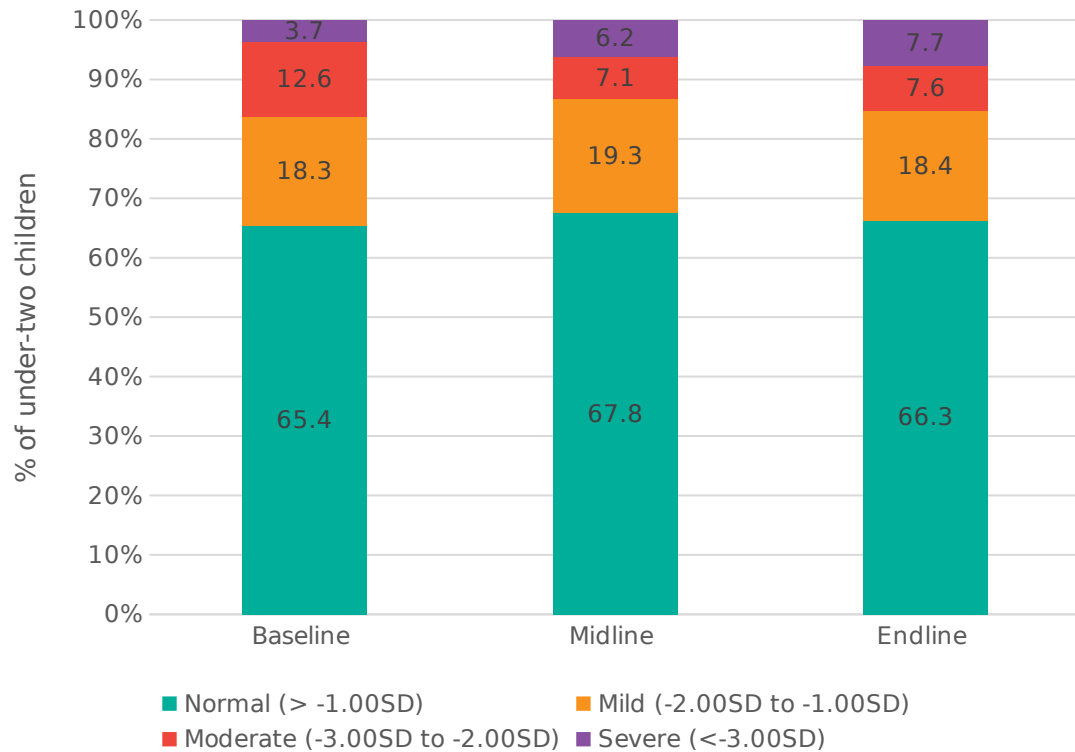
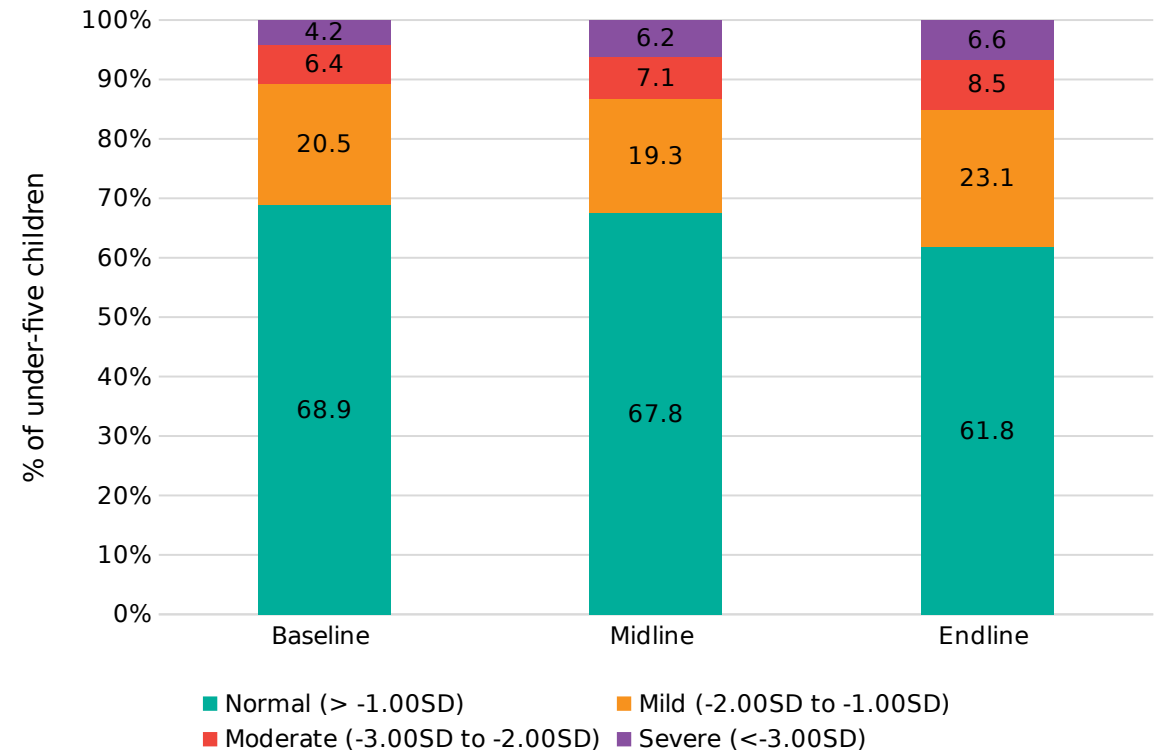


Fig: Changes in WHZ of under-five children from Baseline to Endline



Implication

- Improvement in under-two children's nutritional status observed, but worrisome trend of rising wasting and static severe stunting in under-five children persists
- The Lancet analysis found that the prevalence of wasting among children under the age of five could increase by 14.3% in low- and middle-income countries during 2020 , due to the socio-economic impacts of COVID-19 (Headey et al., 2020)
- While there is a focus on IYCF practices, children aged 23-59 months receive less attention. It is crucial to encourage these children to adopt a balanced diet for sustainable nutritional improvement
- After the midline assessment, BRAC nutrition intervention program was discontinued, and a comprehensive program was introduced to improve maternal, neonatal, and child health and nutrition across the country
- Furthermore, the COVID-19 lockdown and small payment for the services hindered CHWs from conducting door-to-door visits, which could have had an impact on the promotion and monitoring of proper feeding practices

Implication

- Hence, it is crucial to establish Standard Operating Procedures to maintain and enhance the nutritional well-being of children under five during events like the COVID-19 pandemic
- Moreover, it is essential to develop preparedness plans capable of addressing potential future emergencies, including not only pandemic-like scenarios but also other types of crises, in order to advance towards achieving the SDGs

Thank you!