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GENERATION AND MOBILIZATION OF NUTRITION
EVIDENCE TO TACKLE MALNUTRITION: FROM DATA TO ACTION

Assessment of Nutrition information system in Ethiopia

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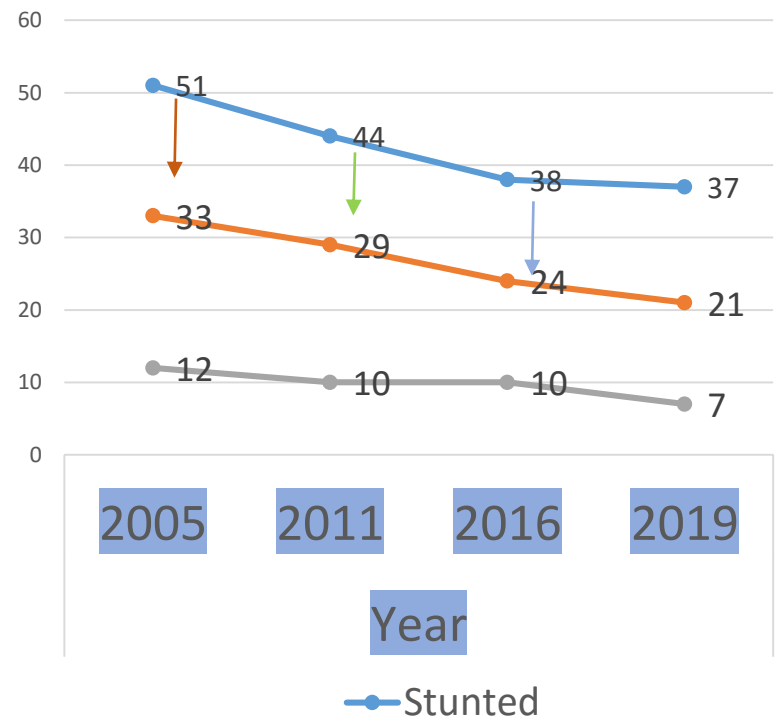
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Presentation outline

- Introduction
- Objectives
- Methodology
- Results and Discussion
- Conclusion
- Recommendations

Introduction

- In Ethiopia, **malnutrition** is one of the major public health challenges. Over the past decade, Ethiopia has **significantly reduced malnutrition** but the problem is still high



Introduction

✓ Rational of the assessment

- ❑ Understanding the current nutrition information system helps to identify the **strengths** and **weaknesses** that needs to be strengthened or changed.
- ❑ In 2020, the European Commission, UNICEF, and WHO jointly launched a project **aimed** at improving national nutrition information systems
- ❑ A strong information system is essential **to track these global targets** and other national nutrition goals and targets.

Objectives

□ The general objective

- ✓ To assess and determine the status of nutrition data management, quality, analysis and use mainly in the health sector

□ Specific objectives were:

- ✓ To assess the types of nutrition indicators and data sources available in the health sector
- ✓ To review the availability and use of nutrition data collection and reporting tools and procedures at different levels of the health system
- ✓ To determine the level of nutrition data quality at different levels of the health system
- ✓ To assess the level of nutrition information use at different levels of the health system
- ✓ To review multi-sectoral nutrition information systems in different sectors

Methodology

Study design

- Cross-sectional study design (quantitative and qualitative data collection)

Sample size and sampling procedures

- Purposive sampling methodology
- Three regions (agrarian, urban, pastoralist)
- Health sector:
 - 3 RHBs, 6 ZHDs, 9 WoHOs, 3 hospitals, 18 HCs, 11 health posts
 - Interviewees: MCH, nutrition focals, M&E/HMIS focals, HEWs
- Other sectors: 14 agri offices, 14 education, 8 water offices
 - Agriculture, Education and water sectors
 - M&E experts and nutrition focal persons of the sectors

Results and Discussion

- NIS in the health Sector
 - Nutrition indicators
 - Nutrition data sources
 - Nutrition data management
 - Data quality
 - Data use
- NIS in other sectors (nutrition sensitive data)
 - Information System in the sectors
 - Multi-sectoral nutrition data management,
 - Multi-sectoral data sharing and use

Nutrition indicators

core nutrition indicators identified and tracked in the health sector

- HSTP-II: 7 nutrition indicators (outcome and impact)
- National food and nutrition strategy indicators: 118 of 282 are expected directly from health sector
- Mainly tracked via the HMIS and EDHS/Mini-EDHS
- Core indicators aligned with global nutrition indicators
- Indicators of the Global nutrition monitoring-framework that can be tracked by the Ethiopian HIS: 14 of the 20

• Nutrition indicators in the routine HMIS

- Standard national indicators reference guide available
- The reference sheet: Details the definition, formula, interpretation, data source, reporting frequency and level of nutrition indicators
- Guideline available in 95% of the assessed facilities

Nutrition indicators...

Adequacy of indicators for nutrition program M&E:

- 8 indicators in HMIS (Screening, supplementation, Rx related)
- Most responded that the existing nutrition indicators in the HMIS are inadequate
- It lacks some areas such as: Adolescent nutrition screening, adolescent supplementation, Infant and Young Children feeding (IYCF) related

Key informants responded:

“The existing standard HMIS nutrition data collection and reporting formats are not adequately addressing current nutrition data needs. It does not include data on nutrition supply and doesn’t have indicators on Infant and Young Children feeding (IYCF)” HMIS unit expert, Oromia RHB

“...I am not satisfied with the current nutrition indicators. We are collecting parallel report because of incompleteness of the required nutrition data elements. To avoid the parallel reports, indicators should be all-inclusive” MCH head, Addis Ketema sub city

2. Nutrition data Sources...

Availability of nutrition data sources/tools

Nutrition tool	Availability (%)	Run out in the last 6 months? (%)
CINUS Register (Comprehensive)	81.0	27.3
Pregnant and Lactating Women (PLW) Nutrition Screening register	81.0	9.1
Infant immunization and growth	90.5	9.1
Therapeutic Food Program register	66.7	9.1
CINUS Tally sheet	52.4	9.1
EPI GM tally	76.2	18.2
Nutrition card	71.4	45.5
OTP card	81.0	45.5
Multi (SC) card	61.9	27.3
HMIS recording and reporting procedures manual	85.0	
HMIS indicator reference guide	95.0	
Data quality guideline	70.0	
Information use guideline	80.0	

3. Nutrition data Management

Nutrition data
compilation,
aggregation,
reporting

- Standard recording and reporting procedures available:
National guideline
 - Compile from each unit and to the HMIS unit
 - One reporting channel, standard reporting flow and timeline available
- Use of some tools was low
 - ANC tally: 21%
 - CiNUS tally (for VAS reporting): 10%
 - CiNUS tally (for GMP reporting): 16%
- Compilation: Standard procedure in most facilities

“The nutrition focal person collects report from registers, tally sheets, and from health extension workers. She then send the report to the HMIS unit using the standard reporting format.” Arada HC, HMIS unit

4. Nutrition Data quality...

Nutrition source document completeness

Data element	# of entries/ individual data checked	Complete	Partially complete
		No (%)	No (%)
Completeness of ANC register (for IFA reporting)	190	160 (84%)	30 (16%)
CINUS register (for GM)	150	100 (67%)	50 (33%)
Delivery register (for low birth weight)	190	150 (79%)	40 (21%)
TFP register (For Number of children with SAM admitted to TFP)	190	160 (84%)	30 (16%)
Total	720	570 (79%)	150 (21%)

- Overall completeness = 79%, lower than the standard ($\geq 90\%$)
- A key informant said “CINUS register is not easy to record and use, which leads to nutrition data quality problem” Deroise HC, Afar, HMIS

4. Nutrition Data quality...

Nutrition data accuracy

	Oromia	Addis Ababa	Afar	Total
VF_IFA	0.87	0.66	1.34	0.79
VF_GMP	0.54	0.56	0.45	0.55
VF_VAS	0.45	0.45	0.56	0.47
VF_MAM	0.75	0.43	0.77	0.77
VF_SAM	0.36	0.70	0.84	0.69
VF_LBW	1.61	0.56	1.08	0.66
VF_Live birth weighted	1.15	0.61	1.54	0.75
VF_TFP	0.98	0.76	1.18	0.94

Key	
Red	VF < 0.90; over reported
Green	VF between 0.9 and 1.10; Consistent
Yellow	VF > 1.10; under reported

- 7 of the 8 indicators: Over-reported
- AA: All indicators were over reported
- Oromia: 5 over reported, 2 under reported, 1 accurate
- Afar: 4 over reported, 3 under reported, 1 accurate

4. Nutrition Data quality...

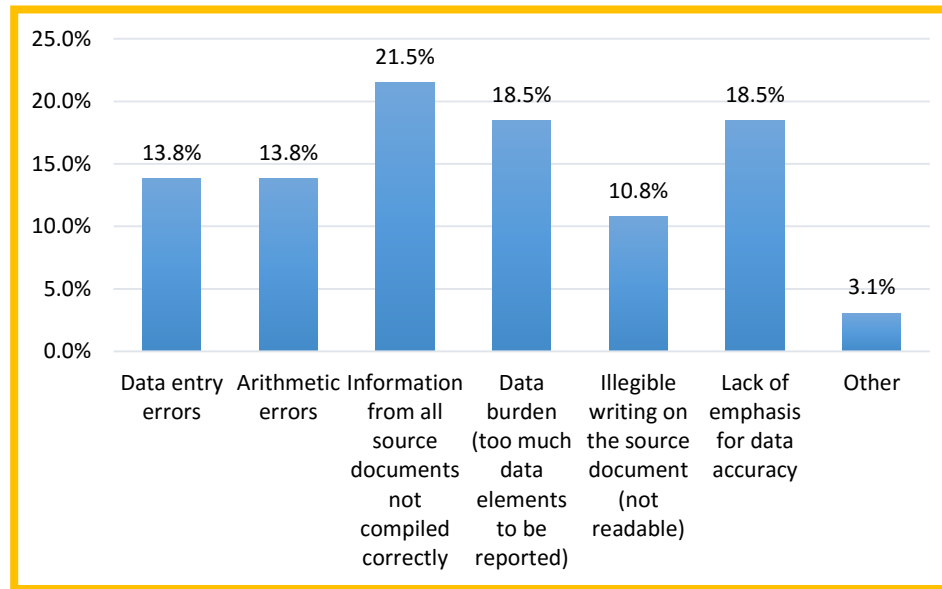
Proportion of health facilities with data verification and level of data verification at health facilities

	IFA		GMP		VAS		MAM		SAM		LBW		Live births weighed		TFP	
	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%	No.	%
% of facilities providing the service and reporting data that have all required source records and reports	21	100%	19	90%	16	76%	19	90%	19	90%	20	95%	20	95%	19	90%
% of facilities for which source data exactly match reported data	10	48%	8	42%	5	31%	9	47%	7	37%	15	75%	13	65%	6	32%
% of facilities that over-report by more than 10% (VF < 0.90)	7	33%	8	42%	11	69%	7	37%	9	47%	1	5%	1	5%	7	37%
% of facilities that under-report by more	4	19%	3	16%	0	0%	3	16%	3	16%	4	20%	6	30%	6	32%

- More than 50% of facilities were either over reporting or under reporting

4. Nutrition Data quality...

- Reasons for data discrepancy between recorded and reported data



NIS in other Sectors

- The majority of respondents (65%) reported that their offices did not have a multi-sectoral nutrition data management and reporting system
- Among those that report nutrition related data to the next level, the majority (65%) did not have a designated person to collect/compile data
- The majority (71%) have not been trained on nutrition information system.
- All the offices at regional and zonal levels did not report nutrition program data to the sector that coordinate nutrition program
- All the assessed sectors reported that multi-sectoral nutrition data use for nutrition program improvement was absent.
- No access to nutrition data from other sectors.

NIS in other Sectors...

Challenges raised by the majority of the key informants on multi-sectoral information system were:

- Low coordination and lack of budget
- Lack of awareness on nutrition information in others sectors
- Lack of standardized report formats in other sectors, other than the health sector
- Nutrition program policy, strategy and guidelines are not familiarized at lower level

Conclusion

- Nutrition information in the health sector is well structured and standardized. However, there is still some challenges persists which includes:
- Shortage of tools and parallel
- Nutrition data quality in the health sector is found to be low
- Limited data analysis and use practice

Conclusion...

- NIS in other sectors: Weak, not well standardized
- Multi-sectoral nutrition data exchange, review and use is very weak
- Nutrition sensitive data collection and reporting is weak
- UNISE, a multi-sectoral nutrition information system, which can improve multi-sectoral nutrition data use is implemented, but its implementation is limited to few sites where SD is implemented

Recommendations

- Short term
 - Include additional indicators and data elements in the existing HMIS (This recommendation is already being used)
 - Provide trainings to MCH, nutrition program managers/experts, M&E/HMIS officers on nutrition information system at different levels
 - Design, print and distribute adequate nutrition data collection tools (registers, tally sheets) to health facilities
 - Support DHIS2 customization and implementation
 - The revised nutrition indicators, data quality validations
 - Dashboard creation, use
 - Provide mentorship, supportive supervision
 - Strengthen regular nutrition data review at d/t level

Recommendations...

- Long term:
 - Design and implement standardized nutrition information system in other relevant sectors
 - Design data quality improvement strategy at national level and cascade its implementation to all levels of the health system
 - Implement HMIS in private facilities
 - Expand UNISE to more sites
 - Create and implement a national and sub-national multi-sectoral nutrition data sharing and review platforms

Thank you for your
Attention