



Report on the Zambia Integrated Management of Acute Malnutrition Database review

Martha Nakakande/Tech RRT



Background

Following the drought that is affecting mainly different provinces in Zambia, many areas have been affected by food insecurity. In all the districts classified in Phase 3 or worse, households are employing food-based coping strategies, such as reducing the number of meals and meal portions, with some having experienced problems in food access in the preceding 30 days. Routine data showed that the average reported mortality from severe acute malnutrition (SAM) in children under five years, from 2016-2018 was 8% (from children enrolled in a treatment programme), indicating poor quality of services for the SAM Children. This mortality rate, if applied to the estimated number of cases of SAM for 2019, tragically translates to an estimated 11,600 child deaths. Figures are likely to be higher if the amount of rains does not increase. This data is likely to be under reported, due to documented problems with the information system and the limited coverage of the integrated management of acute malnutrition (IMAM) program.

The numbers of admissions of children suffering from SAM and moderate acute malnutrition (MAM) in the coming months is expected to be much higher compared to previous year trends, and this does not include children who don't seek treatment. There is need to improve the quality of the management of SAM cases and to absorb the potential increase of cases due to the drought and the revitalization of the active case finding, strengthen capacity to provide quality treatment (inpatient and outpatient) and prevention services to reduce excess morbidity and mortality associated with acute malnutrition.

Justification

UNICEF received funding from United Kingdom Government with the objective of enabling the health care system to respond to prevention and care for children with severe acute malnutrition. Under the leadership of the Ministry of Health (MoH) and National Food and Nutrition Commission, UNICEF is supporting the Government of Republic of Zambia (GRZ) in implementation of the IMAM Programme as part of the Nutrition Response plan in the health sector. Following the emergency need to have the program in place especially in the 58 most affected districts, UNICEF requested the Technical Rapid Response Team (Tech RRT) to provide technical CMAM support in the initial phase of the program. The IMAM advisor's overarching responsibility was strengthening the delivery of the IMAM response through the provision of senior leadership, technical support and capacity building to the nutrition sector partners during an in-country deployment supported by UNICEF Zambia. One of the deliverables in the TOR was a report on the review of the database that is used to monitor the CMAM programme and recommendations on how to improve data collection and reporting quality to track progress using indicators agreed upon by the Nutrition Sector members (deliverable 3).

i) Planned Activities:

1. Review the existing CMAM database,
2. Develop recommendations and actions for strengthening the database.
3. Train database focal points at MOH and with NGOs.

ii) Deliverable outcome: The database review took place and the recommendations are shared below. No training of the database focal persons was done due to time and lack of data focal persons. 22 participants who attended the training in January attended a session to familiarise them with the database interface, data entry and how to generate basic reports.

iii) Challenges

As UNICEF did not have access to the database, it took a long time and various emails to have the IMO share the database and this occurred in the 7th week of the deployment thus not allowing enough time for review, sharing of outcomes of the review and feedback from the IMO. The database shared did not contain enough data and thus did not allow for a good review to be made by manipulating the data.

iv) Deliverable execution and results

Introduction:

The country relies on the national HMIS and currently there are some indicators on nutrition in the HMIS and these do not include the Sphere standard indicators and supplies. This therefore left a need for a database that would be able to capture as much information on nutrition programming. The nutrition database was developed in 2010 with the aim of:

- Addressing the need for a nationwide coordinated nutrition information system,
- Supplement the main MoH information systems (HMIS and SmartCare),
- Strengthening monitoring and evaluation of the IMAM program implementation and
- Generation of information and knowledge to:
 - Justify allocation of resources
 - Identify factors influencing the health outcomes
 - Meet the MoH and donor requirements
 - Maintain institutional memory

The development process was led by the MoH with support from the various partners. It is based on Microsoft Access and with very easy user interfaces to allow lower level nutrition staff to be able to enter the data and make simple reports.

Process:

A discussion was held with the nutrition team at the Ministry of health- national Information management officer, the Senior nutrition officer and UNICEF- the section chief and 3 nutrition department staff supporting the emergency response. The discussion aimed at assessing the database's ability in the following:

- Ease of use and maintenance,
- Interaction between the different data and the user
- Conversion of data into information (meaning from the data)
- Accessibility by different users
- Recovery and back-up capacity.

The discussion looked at:

- How the IMAM database works
- Status of reporting
- Quality of reporting
- The reports produced at the different levels
- Output of this report -graphs, tables, dashboards, automation of the outputs,
- Capacity of those in the reporting chain to use the database.

- The key constraints faced in relation filling in the forms, submission of report, inputting of the data into the database and suggestions to address them

Current database strengths

- The database is strong enough and is grounded enough to allow for further development, and knowledge management in nutrition.
- Simple to use
- District teams have access to data entry and basic performance data such as admission trends
- Some nutrition officers (Provincial and district nutritionists, technologists, nutrition focal persons) have received training on the Database.
- The IMO has a good knowledge of the database

Observations and recommendations

Observed limitations	Recommendations
<p>Manipulation of the data revealed the following:</p> <ul style="list-style-type: none"> - No background checks to flag any skewed or inconsistent data - Database does not allow entries for individual cases. - No dashboard - Reports do not link/relate outputs and outcomes e.g supplies consumed in relation to children that received services. - No targets - Data entry interface has some variations from the paper version used for primary data collection at the health facility level. - The TSFP nutrition supplies report looks at supplies used for SAM treatment not MAM treatment - MUAC screening does not separate data from routine active and passive screening from mass MAUC screening. - Aggregation levels are not consistent. In most reports, aggregation is up to province level, in some health facility aggregation is not possible and aggregation at national level is also missing. 	<ul style="list-style-type: none"> - The IMO with additional technical support should review and update the database taking into account the limitations mentioned. - The nutrition sector should meet to discuss the points indicated and agree on any additional data that can be collected looking at the long-term evolution of nutrition programming in the country- the database should not be restricted to only the collection of basic IMAM programming data. - Avail technical support to the MoH nutrition department to update and improve the database. There is need to create/increase in-country capacity to work on and widen the database to cater for a more inclusive database and allow for data collection from other nutrition programs such as IYCF, MIYCN, surveys
<p>Capacity for M&E:</p> <ul style="list-style-type: none"> - Some of the nutrition officers do not have good computer skills and do not regularly practice (do data entry) and so are not able to use the database effectively. 	<p>Invest in a strong M&E teams at all levels and ensure that primary data collection is effective. This can be through:</p> <ul style="list-style-type: none"> - Training data/information management/M&E personnel

<ul style="list-style-type: none"> - There is little oversight on the primary data collection (training, supervision, mentoring). - Limited equipment in some districts-no computers allocated to the nutrition department. - Limited human resources 	<ul style="list-style-type: none"> - Training the health workers and community volunteers on importance of data collection and the use of the data collection tools, - Ensuring availability of data collection and reporting tools. - Recruitment of data and reporting focal persons. - Strengthen the capacity of the existing IMO to be a national resource person in M&E and database management. - Mentoring and supervision visits that will focus on reviewing how effectively data is collected from the primary source and regular program reviews at districts and provincial levels that entail global analysis of the information generated and linking it to the program outcome and impact.
<p>Hardware and software challenges</p> <ul style="list-style-type: none"> - The backup and recovery is local-host based, thus the national IMO has all the national data on his laptop and an external hard drive. No central server - Compatibility with higher versions of MS access still a challenge. 	<ul style="list-style-type: none"> - Recommend advocating to include a nutrition organization in the national HMIS thus allowing the nutrition sector more host space an access to the central server. - Refining the database and advocating to connect the IMAM database to the national server. - Technical support to solve the software challenges. - Provision of the national IMO with a computer with a much stronger processing power (more than 4gb RAM and OS 64 bit).
<p>Nutrition M&E not on the national agenda Nutrition information and knowledge generation is not on the national M&E framework.</p>	<ul style="list-style-type: none"> - Advocate to have the nutrition made as a department/organization in the HMIS. This gives them opportunity to have most indicators and include other information on nutrition e.g. surveys, IYCF. - Need to renew the national level discussion of having nutrition added to the national M&E framework. - Increase visibility of the database. This can be through showcasing its utility in the nutrition sector and other health fora, expanding it to capture data and report on other nutrition programs that are ongoing nationally especially in areas where IMAM is not fully implemented.

