KENYA - Examining the Complex Dynamics Influencing Persistent Acute Malnutrition in Turkana and Samburu Counties – A Longitudinal Mixed Methods Study to Support Community Driven Activity Design (WAVE III), NAWIRI

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Overview

Identification

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2022-11-14

NOTES
na

Overview

ABSTRACT
Background: Acute malnutrition in infants and children less than 5 years is persistent in the arid and semi-arid lands (ASALs) of East Africa and the Sahel region despite years of investment. In the ASALs of Kenya, the situation is exacerbated by deep-rooted poverty and unequal access to basic services, sustained community conflicts, migration, poor seasonal rainfall/drought and other shocks. Nutrition specific and nutrition sensitive national and county level programs have either not been developed or not implemented effectively.

Objectives: To understand and map immediate, underlying, basic and systemic drivers of acute malnutrition for the development of overarching as well as micro-solutions for the sustainable reduction of persistent acute malnutrition (PAM) and inform pilot studies and Phase 2 (second phase of NAWIRI project implementation) activities in Turkana and Samburu Counties.

Methods: This study is a longitudinal mixed-methods observational cohort study of children less than 3 years and their mothers and/or caregivers in Samburu and Turkana Counties. Both quantitative and qualitative methods were utilized in the data collection processes. Data analysis, learning and adapting are ongoing so that results can inform pilots, theory of change (ToC) review and Phase 3 activities throughout the study.

Study outcomes: To develop new interventions, and to adapt and contextualize existing interventions to prevent global acute malnutrition (GAM); strengthen social and behavior change (SBC) strategies around maternal, infant and young child nutrition (MIYCN), water hygiene and sanitation (WASH), community health systems, gender dynamics, livelihoods and resilience, and to inform improvements of the current nutrition surveillance system.

UNITS OF ANALYSIS
Mothers and/or caregivers with at least one child less than 3 years of age at enrollment.

Scope

NOTES
HOUSEHOLD & WOMEN/CAREGIVER QUESTIONNAIRE

Background, household demographics, household wealth ranking (perception), Household Food insecurity coping strategies, household water hygiene and sanitation(WASH), household shocks experienced, social safety nets and economic safety guards, mother's/caregivers information, pregnancy and antenatal care, family planning, infant and young child feeding practices, supplementation and consumption of iron rich or iron fortified foods, caregiving practices, food safety, hygiene and sanitation practices, child immunization, health and health seeking practices, acute malnutrition screening, community

health volunteers, womens minimum dietary diversity, household food insecurity experience scale (HFIES)), gender, women empowerment, violence and community conflict, psychological wellbeing, women's time use and poverty, psychological wellbeing and anthropometric measurements.

Coverage

GEOGRAPHIC COVERAGE

Turkana and Samburu Counties.

UNIVERSE

The survey covered households with children less than 3 years and their mothers and/or caregivers in Samburu and Turkana Counties

Producers and Sponsors

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Metadata Production

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Sampling

Sampling Procedure

SAMBURU

The study sample was population-based, with stratification by sub-counties grouped into three survey zones (Central, North, and East) reflecting administrative sub-counties used in the Samburu Standardized Monitoring and Assessment of Relief and Transitions (SMART) Surveys. Stratification by livelihood zones was done through post-stratification analysis. We analyzed the data by livelihood zone because it was hypothesized that undernutrition might be more related to a household's livelihood than to its physical location.

As noted, the study used mixed-method techniques with quantitative and qualitative data collection. The quantitative component included a household survey and a caregiver survey and covered 699 households. The qualitative data collection activities yielded rich and in-depth insights that will be triangulated with the quantitative survey findings in a companion report. Therefore, this report focuses only on findings from the quantitative survey component. Results are reported for global acute malnutrition (GAM), stunting, and underweight. However, the discussion focuses only on GAM because the purpose of the Nawiri program is to reduce persistent acute malnutrition.

The baseline data collection was carried out in June and July 2021 following a full household listing operation in the county to establish the sampling frame of households with children under 3 years. Subsequent data collection waves are planned for November-December 2021 (Wave 2), March-April 2022 (Wave 3), September-October 2022 (Wave 4), March-April 2023 (Wave 5), and August-September 2023 (Wave 6).

TURKANA

The study sample was population-based, with stratification by sub-counties grouped into four survey zones (Central, North, West, and South) reflecting administrative sub-counties used in the Turkana Standardized Monitoring and Assessment of Relief and Transitions (SMART) Surveys. Stratification by livelihood zones was done through post-stratification analysis. We analyzed the data by livelihood zone because it was hypothesized that undernutrition might be more related to a household's livelihood than to its physical location.
As noted, the study used mixed-method techniques with quantitative and qualitative data collection. The quantitative component included a household survey and a caregiver survey and covered 1,211 households. The qualitative data collection activities yielded rich and in-depth insights that will be triangulated with the quantitative survey findings in a companion report. Therefore, this report focuses only on findings from the quantitative survey component. Results are reported for global acute malnutrition (GAM), stunting, and underweight. However, the discussion focuses only on GAM because the purpose of the Nawiri program is to reduce persistent acute malnutrition.

The baseline data collection was carried out in May and June 2021 following a full household listing operation in the county to establish the sampling frame of households with children under 3 years. Anthropometric data were collected from all under-5 children in the sampled households. Subsequent data collection waves are planned for October-November 2021 (Wave 2), March-April 2022 (Wave 3), September-October 2022 (Wave 4), March-April 2023 (Wave 5), and August-September 2023 (Wave 6).

Deviations from Sample Design

na

Response Rate

na

Weighting

na

Questionnaires

Overview

Women/caregiver questionnaire: background, informed consent, household demographics, poverty probability index (pp1), household wealth ranking (perception)), food consumption, water, hygiene and sanitation (WASH) (water access, availability and seasonality, household water insecurity experiences (HWISE) scale, hygiene and sanitation), household shocks experienced, social safety nets and economic safety guards, mother's/caregivers information, pregnancy and antenatal care, family planning, infant and young child feeding practices, supplementation and consumption of iron rich or iron fortified foods, maternal knowledge and attitude, on infant and young child feeding practices, caregiving practices, child feeding utensils hygiene, food safety, hygiene, and sanitation practices, child immunization, health and health seeking practices, acute malnutrition screening (community health volunteers), womens minimum dietary diversity, food insecurity experience scale (HFIES), gender, women empowerment, violence and community conflict, psychological wellbeing and anthropometric measurements

Data Collection

Data Collection Dates

Start	End	Cycle
2022-05-01	2022-06-10	3

Data Collection Mode

Face-to-face [f2f]

Questionnaires

Women/caregiver questionnaire: background, informed consent, household demographics, poverty probability index (pp1), household wealth ranking (perception)), food consumption, water, hygiene and sanitation (WASH) (water access, availability and seasonality, household water insecurity experiences (HWISE) scale, hygiene and sanitation), household shocks experienced, social safety nets and economic safety guards, mother's/caregivers information, pregnancy and antenatal care, family planning, infant and young child feeding practices, supplementation and consumption of iron rich or iron fortified foods, maternal knowledge and attitude, on infant and young child feeding practices, caregiving practices, child feeding utensils hygiene, food safety, hygiene, and sanitation practices, child immunization, health and health seeking practices, acute malnutrition screening (community health volunteers), womens minimum dietary diversity, food insecurity experience scale (HFIES), gender, women empowerment, violence and community conflict, psychological wellbeing and anthropometric measurements

Supervision

Field operations supervision was done in two layers: daily supervision by team leaders, and a weekly review of activities and data quality by the data coordination team, which included a research officer, a data analyst, a software programmer, and a postdoctoral research scientist an associate research scientist, sub county nutrition coordinators from Turkana West, Turkana East and North/Kibish. At a higher level, a weekly report on issues arising from the field and discrepancies observed in data were shared with the senior research team, which included the co-principal investigators and co-investigators, who advised on the necessary actions to be taken. The county Nawiri team and county government officials-consisting of sub-county nutrition coordinators from Turkana East and North/Kibish, the county nutrition coordinator, representatives from Mercy Corps and RTI, the Ministry of Health Monitoring and Evaluation Officer, and NDMA staff-were also involved in the whole process, from training fieldworkers to supervising data collection activities in all four survey zones.

Data Processing

Data Editing

Data quality monitoring processes and checks were implemented throughout the data collection process, during the time of developing the data collection tools (through built-in quality control in the tablet-based platform), during training of fieldworkers, in real time during data collection (routine monitoring by the research team and periodic cross-checks against the protocols), and during the data cleaning process. During fieldwork, data quality was enhanced through regular spot checks and sit-ins by supervisors to verify the authenticity of data collected. Data were then reviewed and certified by the field coordinator before they were transferred to the server.

The quantitative data were collected using SurveyCTO, a survey platform for electronic data collection that has in-built skips and quality checks. Using this software increased efficiency and reduced the time needed for cleaning the data. In addition, the platform supported offline data capturing for regions with slow or no internet connectivity and data transmission when the internet became available. Fieldwork was conducted by trained fieldworkers using digital tablets with the questionnaire loaded in SurveyCTO. The questionnaire included the following modules: (1) identification and tracking, (2) demographics and household composition, (3) anthropometry of children <5 years and mothers, (4) socioeconomics, (5) household food security, (6) WASH, (7) health-seeking behavior, (8) MIYCN, (9) shock experience/exposure, and (10) shock preparedness and response. Data were uploaded from the tablets onto a secure African Population and Health Research Center (APHRC) server after each day of data collection. Data were synchronized automatically to a server when the tablet was in a location with network coverage. The uploaded data were then checked for quality daily by a data manager and a team dedicated to coordinate field procedures and at the APHRC head office in Nairobi.

Other Processing

na

Data Appraisal

Estimates of Sampling Error

na

Documentation

Questionnaires

WAVE 3-REVISED NAWIRI Caregiver Tool

Title	WAVE 3-REVISED NAWIRI Caregiver Tool
Author(s)	APHRC
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Country	Kenya
Language	English
Filename	WAVE 3-REVISED_NAWIRI Caregiver tool.pdf

Other materials

NAWIRI protocol Final

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