IMA WORLD HEALTH

UKaid
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NUTRITION
in the Democratic Republic of Congo
ASSP and ASSR - 2013 to 2022

IMPACT OF ASSR NUTRITION COMPONENT

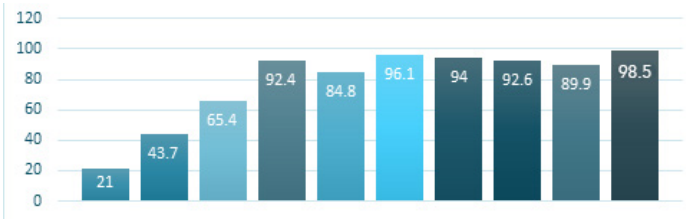
SCREENING

In October of 2020, nutrition screening activities, developed during the ASSP project, were scaled up in all 40 ASSR project health zones. Intensive systematic screening by MUAC was implemented to ensure all children 6 to 59 months of age were screened once a quarter in the health zones supported by the ASSR project across three provinces: the Nord Ubangi Province (11 health zones), the Kasai Province (18 health zones), and the Kasai Central province (11 health zones).

Initial roll out of intensive systematic screening started in October 2020. The proportion of children screened went from 21 percent in October 2019 to 98 percent in March 2022. Over the past seven quarters since roll out, the proportion of children screened has averaged 92 percent. Approximately 1,500,000 children have been screened per quarter. These screening results, which are shown in the graph to the right, have been tracked through data gathered by community health workers (Recos), validated by the health zones, and uploaded into DHIS2.

57% Decrease in Malnutrition

from April 2020 to March 2022, the prevalence rate of children 6 – 59 months, with a mid upper arm circumference of 12.5 cm or less, has decreased by 57%, falling from 12.3% to 5.3%.

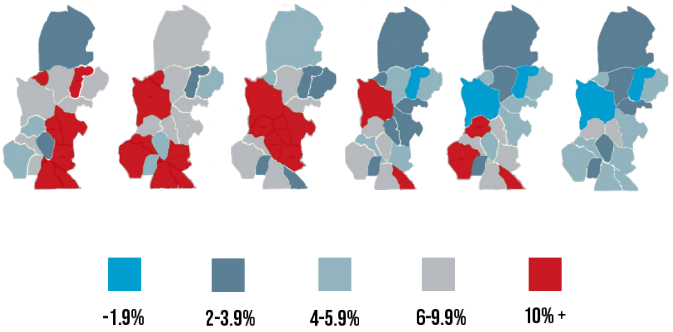


Proportion of Children 6 – 59 months Screened Per Quarter, Oct 2019 – Mar 2022, in the 40 health zones.

PREVALENCE RATE

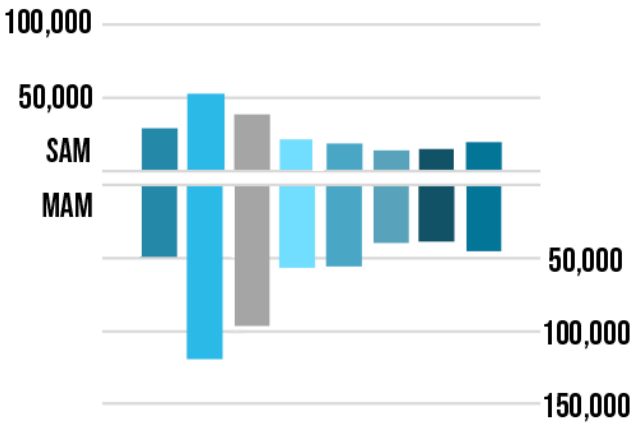
In addition to identifying malnourished children, the intensive screening activity and data enabled the project and health zone management teams to track the prevalence rate of malnutrition. From April 2020 to March 2022, the prevalence rate of children 6 to 59 months, with a MUAC reading of 12.5 cm or less (SAM or MAM), has decreased by 57 percent, falling from 12.3 percent to 5.3 percent.

In January 2020, the ASSR project started tracking the number of children screened and referred with SAM and those with MAM to see what impact the ASSR nutrition approach was having on children based on severity of malnutrition. Over the last eight quarters, the total number of children with SAM decreased on average per quarter in 2021/2022 by 22,607 cases compared with the average per quarter in 2020. The total number of children with MAM decreased on average per quarter in 2021/2022 by 41,496 cases compared to the average per quarter in 2020.



Kasai Province: Percent of screenings producing a MUAC score of less than 12.5 cm each quarter from April 2020 on left to September 2021 on right.

RECOVERY RATE



Recovery Rate: Number of children with severe acute malnutrition (SAM) and moderate acute malnutrition (MAM) per quarter from April 2020 to March 2022.

For the last six quarters, the majority of children with MAM & SAM detected during screening received five follow-up home visits by Recos, with a quarterly average of 69 percent of children recovering from malnutrition by the fifth visit. These results have been achieved at an approximate cost of 7¢ per child screened and $1.73 per child recovered.

HOW WERE THESE RESULTS ACHIEVED ?

These results were achieved through two FCDO health projects funded by the British government. The first project, Access au Soins de Santé Primaire, (ASSP) ran from April 2013 to March 2019. The follow-on project, Appui au Système de Santé en RDC (ASSR) started in April 2019 and ended March 2022. Through these projects, IMA carried out nutrition interventions in three provinces covering a total of 40 health zones mentioned above. In both projects, the nutrition interventions were carried out through the DRC health care system and focused on preventing malnutrition by strengthening the capacity of community health workers (Recos), health care providers (nurses), and the health zone management teams (HZMT) that included a health zone nutritionist, health zone head doctor, and data manager.

ASSP

In the first project, ASSP, the focus was on training 10 Recos, including one Coach Reco per health area. Key elements of the nutrition intervention included training Recos on the following:

- Infant young child feeding (IYCF) messaging, targeted to the age of the children in a household.
- MUAC screening of children between 6 and 59 months.
- How to carry out demonstrations on making an enriched porridge, using locally available ingredients.
- How to carry out home visits to families with malnourished children (five visits over three months).
- How to set up IYCF support groups for young mothers (minimum of one per Reco).
- How to plant and maintain home gardens.
- Promotion and use of chaya and moringa.

- Certification of Recos in IYCF, home gardening, home visits, and intensive systematic screening by Coach Recos to ensure competence and continued learning
- How to report on activities and use analysis of data for prioritizing supervision & decision making (Recos, Coach Recos, Nutritionists).

During the ASSP project, Recos were trained to screen children with MUACs. However, the screening was random and was only guided by a target of 20 children per month per Reco. Children found to be suffering from SAM and MAM were referred to the health center for evaluation by a nurse. If the child was a confirmed case, the nurse would assign a trained Reco to follow up on the child with five home visits over a three-month period.

At each visit, the Reco would measure the arm circumference of the child and other children in the family under five years of age. The Reco would share a nutrition message targeted to the age of the malnourished child and share a gardening message based on the limiting factor for having a garden. The Reco would also share essential family practices such as using potable water, hand washing etc. At the next visit the Reco would evaluate the adoption of the messages by the family. If the messages had been adopted, then the Reco would provide another message, if not adopted the Reco would investigate further.

Emphasis was placed on teaching families to make an enriched "Four Star"porridge with locally available ingredients, as it provides an affordable and nutrient rich alternative to ready-to-use therapeutic foods (RUTFs). Promotion of home gardens included seeds and/or cuttings for key porridge ingredients such as chaya, or moringa, and local spinach or amaranth. Mothers were encouraged to make this porridge in the mornings so that their children had multiple meals to eat from throughout the day. Four Star porridges are named as such to remind families of the four key base ingredients to creating a nutritionally balanced porridge for their young children: cereal or starchy root base, dark green leafy vegetables, protein source (either animal or plant origin), and palm oil. Recipes provided to families were altered based on regional preference and availability but always included the four base ingredients.

The Recos were instructed to carry out two enriched porridge demonstrations for the caretaker of the child. The first demonstration was to be carried out by the Reco. For the second demonstration, the Reco was asked to observe the caretaker make the enriched porridge. The project did not provide the ingredients for the demonstrations. The Reco would ask the family to gather the ingredients necessary for the demonstration.

Sometimes the Recos would provide the ingredients from their own sources if the family was unable to provide the ingredients.

In addition to recipe demonstrations at home visits, cooking demonstrations took place as part of routine education at the health centers and as peer-to-peer demonstrations during the monthly IYCF support groups. Monthly IYCF support groups, led by the RECOs, were also a key contributor to ASSP success. Not only was it a platform for education, but it also supported social and behavioral change through positive deviance. Families with children who had successfully recovered from malnutrition were invited to share their experiences with their peers at the support groups.

ASSR

ASSR built on the progress made in ASSP. However, it was clear there were pockets of children not being reached by the ASSP program. The number of Recos was expanded to an average of 15 Recos per health area. Intensive systematic screening was implemented versus random screening. Support group members were trained and encouraged to assist the Recos in MUAC screenings to help reach every child, thus creating a truly community-led intervention package.

More focus was also put on increasing the capacity of the health zone nutritionist, Coach Recos, and health zone management team. The implementing teams worked with health zone doctors, nutritionists, and Coach Recos to identify the health areas with high prevalence rates and develop action plans for those health areas. This was possible because the program took intensive systematic screening to scale in ASSR which provided the prevalence data.

The steps to carrying out intensive systematic screening were as follows:

- A micro screening plan was established by the head nurse and Coach Reco for each health area and validated by the health zone nutritionist.
- The micro screening plans/maps indicated the villages or households to be screened by each Reco and the estimated number of children to be screened per quarter.
- IYCF support groups members were taught how to use MUACs to help each Reco with the screening.
- The members were taught how to fill out the forms to report on the screening results to their Reco.

The forms were collected by the Recos who gave the results to the Coach Reco. The data was validated by the CODESA and head nurse before being sent to the health zone office and entered into the DHIS2 system.

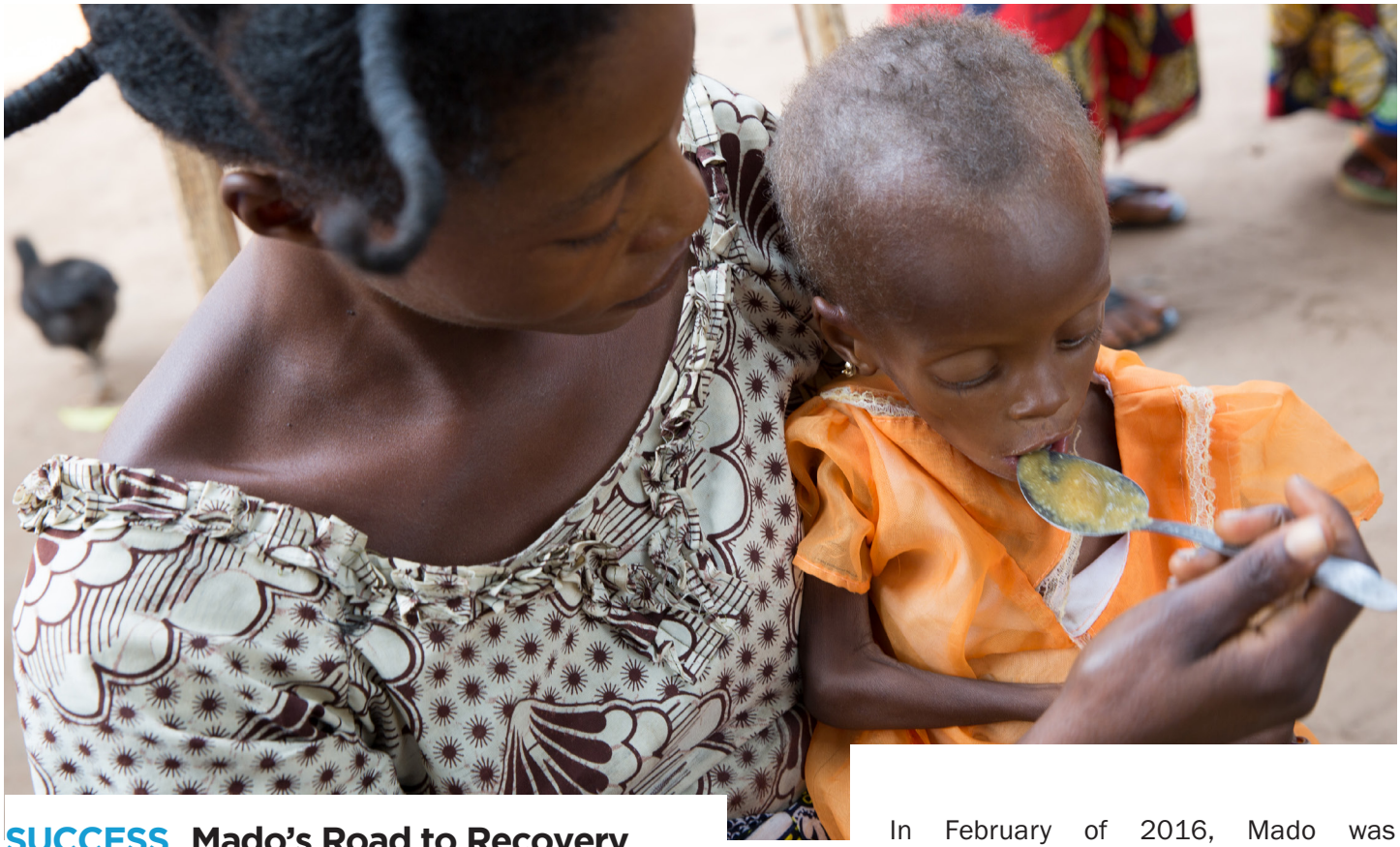
At each screening, an age-appropriate nutrition message was given to the child's caretaker by the Reco or IYCF support group member. Children screened and found to be suffering from SAM and MAM were referred to the health center for evaluation by a nurse. The Recos were instructed to only report one screening per child per quarter. It is important to note the Recos were not prohibited to screen children in between quarterly screenings, however those screening results were not to be reported if the child had been screened earlier in the quarter and the result had already been reported.

As with the ASSP project described earlier, when a child was referred to health center for MAM and SAM, the nurse would evaluate the child. The nurse would assign a trained Reco to follow up on the children with SAM or MAM with five home visits. If plumpy nut was available at the health centers, the children with SAM were enrolled in the PCIMA program to receive plumpy nut and also received the five home visits by the Reco with all the nutrition and gardening messaging, and demonstrations on making an enriched porridge with local ingredients. The majority of health zones and health aires did not have PCIMA programs with plumpy nut during the ASSR project.

CONCLUSION

The impact of ASSR and ASSP nutrition programs carried out by IMA World Health have had significant impact in reducing SAM and MAM. The approach is a good use of funds from a public health standpoint as it brings better nutritional health to the greatest number of children at the lowest cost relative to programs that distribute RUTF's. The approach is much more financially sustainable over the long term and empowers communities to address malnutrition with local resources.

"When ASSR is over, I will continue to visit every household and do the necessary work to combat malnutrition in my community.We are obligated."
Faustin Lukadi, RECO, Kasai Central



SUCCESS Mado's Road to Recovery

In February of 2016, Mado was discovered by an ASSP trained Reco and diagnosed severely malnourished. The Reco returned for the first home visit and taught her mother how to make an enriched porridge made of ingredients found in local markets. Pictured above, her mother feeds her the porridge for the first time. The road to recovery was swift for Mado. The Recos continued to visit her home once every two weeks for three months. When IMA staff returned six months after the first home visit, Mado was a different child, walking and laughing with her mother. Now, at the end of the project, IMA staff returned one last time to see how she was doing. Her mother explained to them that she wasn't home, she was in school. Now Mado, pictured right, can write her name. She is one of 481,000 children who have recovered from malnutrition since the start of ASSP.

Mado, pictured above in 2016 and again here in March of 2022, is one of the many children who are now leading a full and healthy life thanks to IMA's nutrition program.