ACTION AGAINST HUNGER

RESEARCH FOR NUTRITION INTERNATIONAL CONFERENCE

14 - 15 OCTOBER #R4NUT 2021

INDEX

Cover photo: Binta holding her daughter in southern Mautitania.

PREFACE

The growing demand for assistance and the increase in people in need requires not only more aid, but a new way of thinking to gain efficiency and value for money. The persistence of acute malnutrition as the most visible type of malnutrition -that carries the highest risk of death- calls for new solutions and ways of working to accelerate prevention, early detection, and treatment efforts to address child wasting more effectively.

To tackle this challenge, we need to work with established and new partners to draw ideas, expertise, and resources. Building an ecosystem of players and collaborative approaches to stimulate innovation and quality research.

With a focus on improving local capacities and people-focused nutrition actions, the Research for Nutrition Conference 2021 has brought together new evidence and the latest research findings on the prevention, diagnosis, and treatment of malnourished children. This document summarises the different sessions, with a focus on presenting decentralised and innovative approaches that promote local community-based solutions, highlighting the need for building prevention and caring for people's nutrition where they are, empowering communities and mothers, and focusing on transforming community capacities into local solutions.

Twenty research studies -selected from over 60 abstracts received- were presented through four panels. Engaging with different stakeholders: 640 participants, over 15 research institutions and the participation of actors from the private sector, international donors, UN agencies and Government National Nutritional Programmes.

In this briefing, we have summarised in four articles the knowledge and exchange shared during the Conference, connecting different organisations and initiatives, and injecting science and energy into our collective efforts to end hunger.

We hope you will enjoy reading these articles and remember the critical discussion we had. The next Research for Nutrition Conference will be in 2023, but in 2022 we invite you to join us for the Together Against Hunger: Rethinking the fight to be held in October/2022 at the Kennedy Centre, Washington DC. With the aim of rebooting, reconceptualising and reimagining what a world without hunger looks like and identifying critical steps to enact a collective blueprint to get us there.

AMADOR GÓMEZ
Research and Development Director at Action Against Hunger

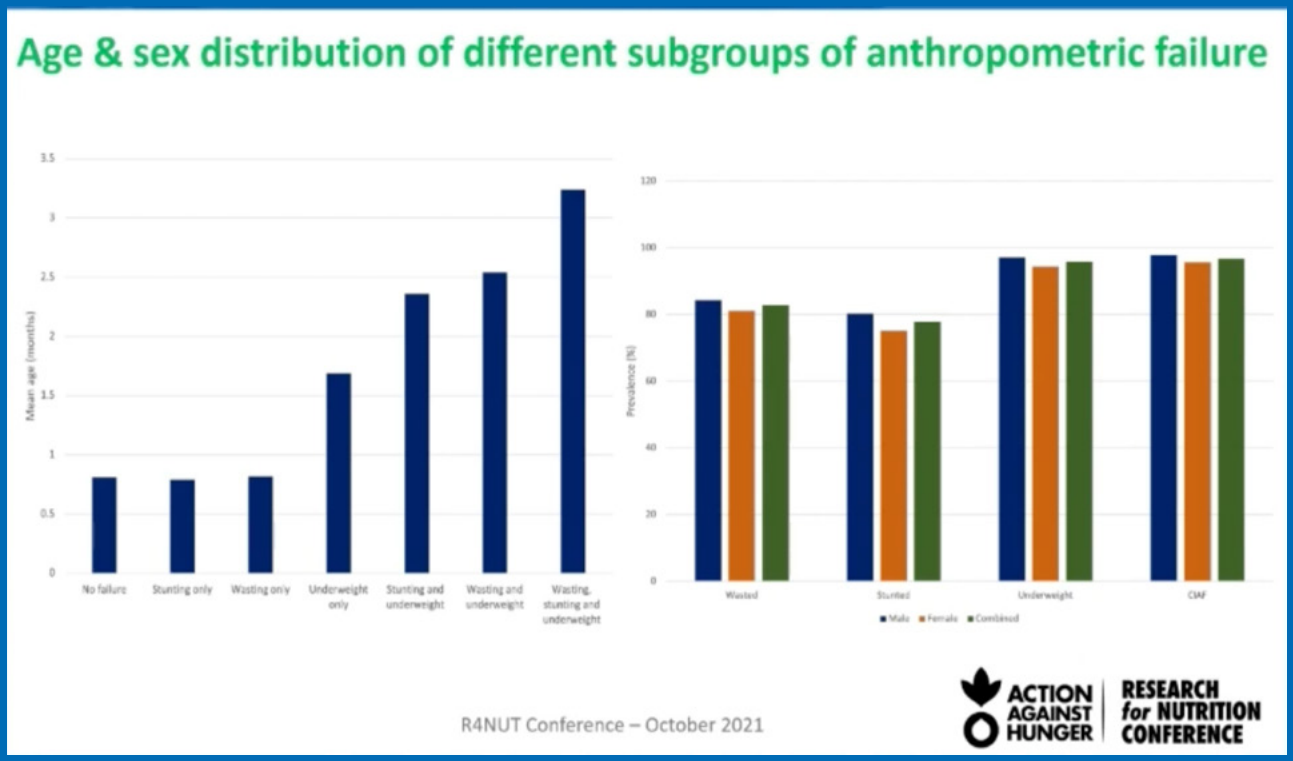
1

GAPS IN THE ANTHROPOMETRIC PARADIGM FOR THE DIAGNOSIS OF ACUTE MALNUTRITION

THE NEED FOR A QUALITY AND ACCESSIBLE DIAGNOSIS

A mother takes care of her son, Alassane, while they measure his arm's circumference –an index of children's nutritional status in situations such as famine or refugee crises- after being referred to Sélibaby's hospital by an Action Against Hunger team in Mauritania.

© Lys Arango for Action Against Hunger



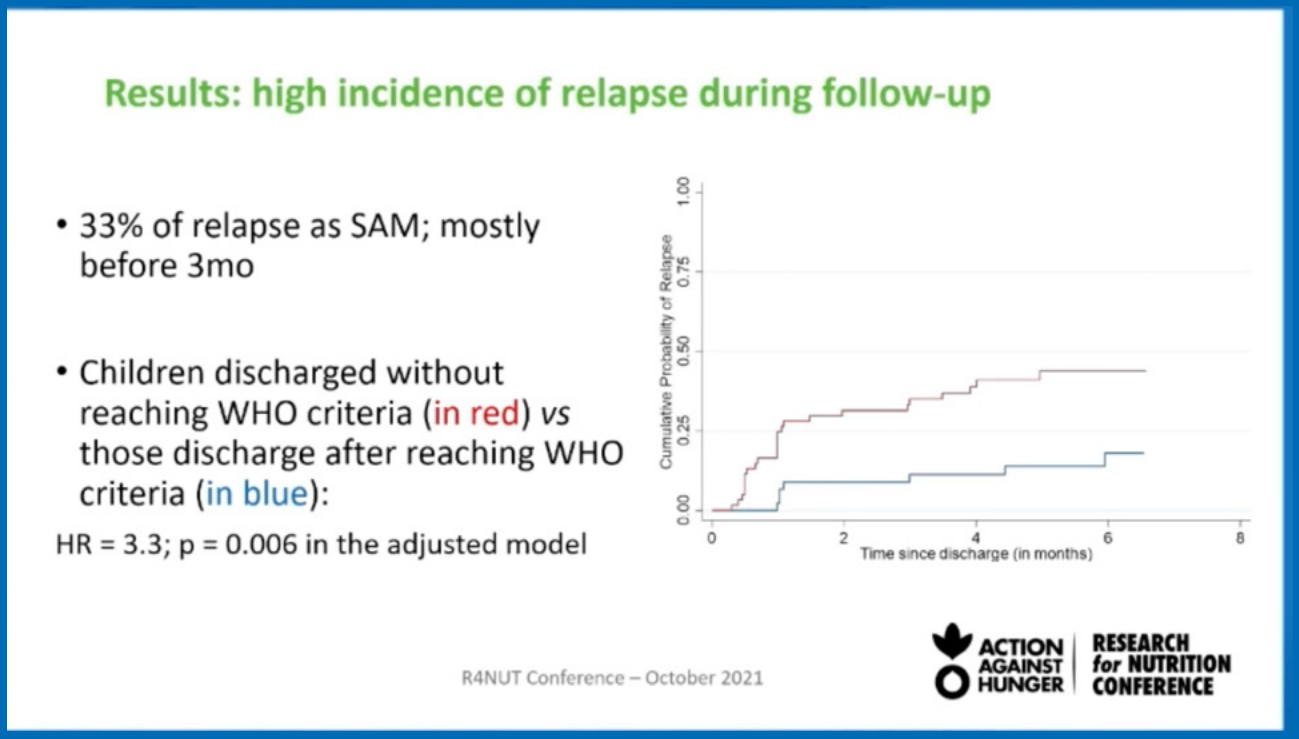
NUTRITION DIAGNOSIS IS THE GATEWAY TO TREATMENT

Malnutrition is the third leading cause of death in children under five years old in sub-Saharan Africa; in addition to the mortality, delayed nutritional recovery in severe acute malnutrition (SAM) is responsible for increases of disability-adjusted life-years (DALYs) for children younger than 5 years old[1]. Essential to countering these growing numbers is early detection of acute malnutrition for timely treatment. Nutritional diagnosis is the entry door for treatment. Without nutritional diagnosis, there is no access to treatment. Despite the availability of treatment approach such as the Community-based Management of Acute Malnutrition (CMAM), millions of children are still unable to access treatment, putting their health and lives at risk. One of the main barriers for receiving treatment is that children are not being diagnosed. SAM and its complications can be difficult to recognise unless objective diagnostic measures are applied. The challenge of increasing programme coverage starts with an easy, quick and reliable diagnosis. Other challenges include facilitating rapid nutritional assessment and community nutritional surveillance, and reinforcing nutritional data management and facilitating the decision making process regarding the extent of nutritional needs, as well as how to best formulate programmes[2].

In some of the most remote areas of the world, diagnosis is dependent on Community Health Workers (CHWs). Despite the positive changes that have taken place since the adoption of

1.UNICEF, 2021.

2.Susana Moreno, Senior Nutrition Advisor EPINUT Research Group.

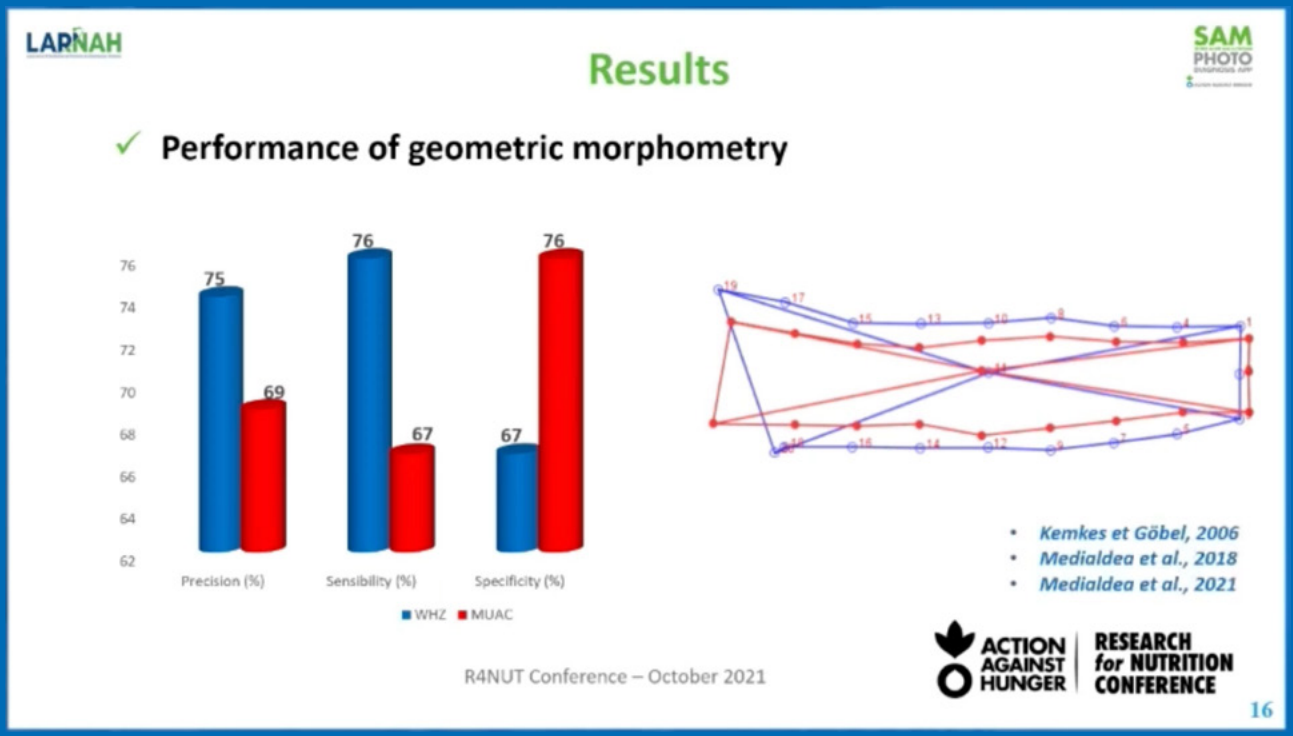


the CMAM approach, it has not yet reached its full potential. Weaknesses in the screening process and management systems often result in sub-optimal community mobilization or weak diagnostic and referral mechanisms. Indeed, early diagnosis of malnutrition is essential to save lives, but several issues can cause misdiagnosis and lead to reduced coverage. Screening children for malnutrition requires anthropometric measuring equipment that is complicated to transport and maintain at community level, as well as WHO reference tables, which are difficult to decipher for some CHWs (or others with low literacy skills) and therefore prone to misdiagnosis[3].

Measuring weight and height can be costly and time-consuming, limiting screening activities to certain areas and/or reducing the frequency of screening and surveillance activities, thus limiting coverage. In addition to all these problems, there is the difficulty of reporting cases and the heavy burden of epidemiological reporting systems based on supervision and paper reports. These systems are often inefficient in identifying situations and in developing an adequate and timely response.

To simplify nutritional diagnosis in treatment programmes, should MUAC be used as the sole anthropometric criterion? Three different diagnostic criteria recommended by WHO are used to identify children aged 6 to 59 months with acute malnutrition: weight-for-height (WHZ), middle upper arm circumference (MUAC) and bilateral pitting oedema for admission to therapeutic nutrition programmes. The desire to simplify the treatment of uncomplicated SAM to enhance the coverage has been increased as experience in community management has grown[4]. The possibility of using MUAC as the sole anthropometric criterion has been suggested due to the simplicity of the measurements, the potential for increased coverage, and the low cost. Even though this line of thinking shows promise, evidence has not yet been conclusive given the transition to a single MUAC threshold for admission to therapeutic management is

3. Imteaz Mahmud, Power of Nutrition | Anthropometric deficits and their association with mortality among under 6 months old infants seeking inpatient therapeutic care in 12 countries: A secondary data analysis.
4. Guesdon Benjamin, ACF | Anthropometry at discharge and risk of relapse in children treated for severe acute malnutrition: A prospective cohort study in rural Nepal.

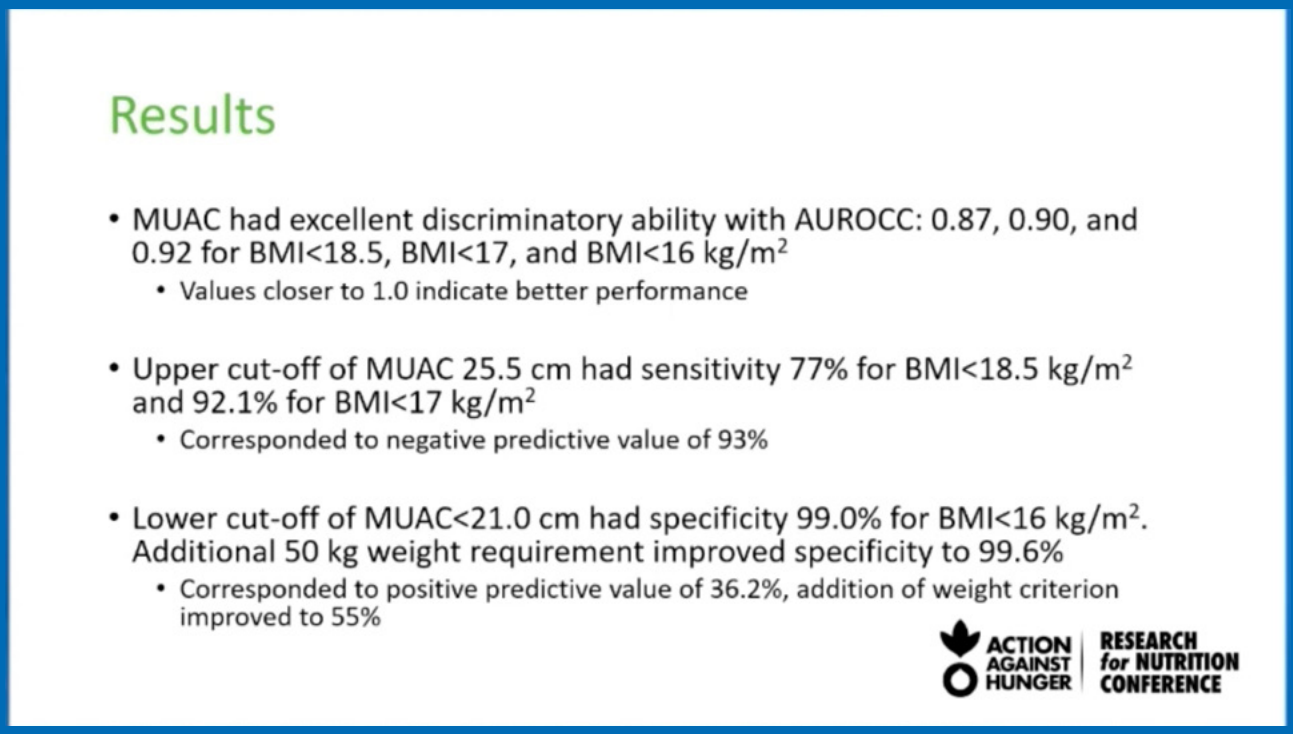


complicated by the fact that MUAC and WHZ identify different children[5].

Integrating innovative digital solutions and new techniques (geometrical morphometry) have a great potential for strengthening local and community capacities for effective screening and diagnosis of child undernutrition and improving nutritional data management[6]. Geometric shape, in addition to allowing clear visualization of metric changes, has less environmental variance than size. As such, it becomes the character of choice to address questions related to malnutrition identification as well as simpler and easier monitoring. Geometrical morphometry differences is implemented and considered in the SAM Photo Diagnosis App® tool, which is of Interest in the framework of community-based management of acute malnutrition programmes. With its integration as a nutritional diagnostic tool, we have the potential to; increase coverage, facilitate community management of child malnutrition and strengthen health systems.

New approaches for quick nutritional diagnosis and the integration of new technologies could revolutionize routine epidemiological monitoring of malnutrition and community based surveillance systems. Proper data is essential in understanding the extent of nutritional needs, as well as how to best formulate programmes to address those needs most appropriately[7]. During emergencies and when large-scale responses are needed, it is important to know where to respond and to concentrate supplies. Several different methods to rapidly assess a nutritional situation have been elaborated and endorsed by different humanitarian actors and scientific bodies. Moreover, the lack of a standardized method of rapid nutrition assessment hampers the comparison of data in order to capture significant changes. Reliable estimates of acute malnutrition burden are needed

4. Guesdon Benjamin, ACF | Anthropometry at discharge and risk of relapse in children treated for severe acute malnutrition: A prospective cohort study in rural Nepal.
5. Montse Escruela Cabrera, MSF-S | Operational experience on the use of MUAC as the sole anthropometric criterion for admission and discharge in outpatient - Madaoua district of Niger, 2018-2019.
6. Ndiaye Adji Mbene, LARNAH-UCAD | Morphometric comparison of the shape of children aged 6-59 months suffering from moderate acute malnutrition assessed by weight-for-height and MUAC indicators in rural Senegal.
7. David Philpott, CDC | Use of mid-upper arm circumference to screen for thinness among sub-Saharan African male detainees.



for policy decisions and for planning, implementing and evaluating services in the context of competing public health priorities and limited resources. These estimates are considered a major step toward the development of cost-effective health interventions.

The main objective to strive for in nutritional diagnosis is to minimise the inclusion and exclusion errors of at risk children, optimizing resources used while maintaining effective criteria and tools. An ideal approach will be based on the context and the characteristics of the target population such as growth patterns, morphotype, body composition, accessibility, resources and available means, etc. It will entail a balance between accuracy, practicality and feasibility for making a decision on the most effective approach. The persistence of child severe acute malnutrition (SAM) and continued gaps in programme coverage have made methods for expanding detection and diagnosis of acute malnutrition an urgent need. ■

Watch Session 3 of #R4NUT2021 here.

2

ANTICIPATION AND PREVENTION
A GOOD INVESTMENT FOR A SUSTAINABLE IMPACT

Darmi Kegna Sara, 23, and her baby, Nadi Kegna, 1, at home in Moyale, Ethiopia. Darmi almost lost her baby girl, Nadi, to malnutrition, but quick action by Action Against Hunger at its Stabilisation Centre saved the baby's life.

© Peter Caton for Action Against Hunger

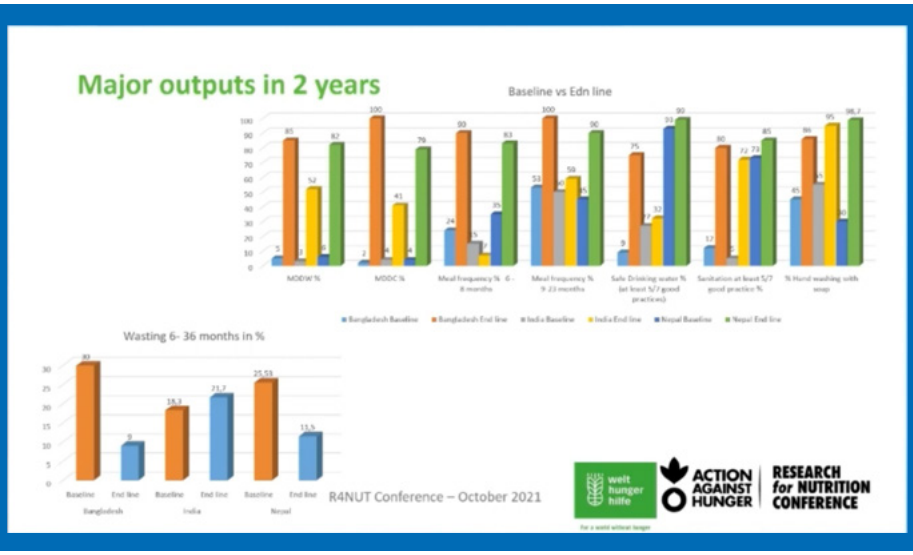
ANTICIPATION AND PREVENTION OF ACUTE MALNUTRITION

1 Alexandra Rutishauser, Head of Nutrition – Action Against Hunger UK. 2 Sweta Banerjee, Nutrition Specialist – Welthungerhilfe. 3 Mebit Kebede, Food Security, Livelihood and Resilience Advisor - Save the Children. 4 Marlène Hebie, Roving Nutrition Advisor- GOAL. 5 Anastasia Marshak, Researcher – Feinstein International Center, Tufts University. 6 Molly Lasater, Post-doctoral Fellow - Johns Hopkins Bloomberg School of Public Health.

Malnutrition is one of the main causes of death in children under 5 years of age and one of the most common factors threatening children's life and health. Anticipation and prevention is considered as the way forward in fighting malnutrition, a necessity for sustainable impact in populations and more effective than treatment[1]. Prevention is the starting point, and more effort is needed to analyse the specific drivers of persisting forms of malnutrition, particularly acute malnutrition cases, in each context, and to tailor strategies and document approaches. Evidence-based strategies to integrate prevention and treatment at scale need to be developed and implemented. The effectiveness of nutrition-specific and nutrition-sensitive activities to prevent acute malnutrition lacks robust evidence, and concerted effort is required to address this gap. Similarly, while the data revolution is increasingly shaping how we create, think, collaborate and act, data in nutrition lags behind. Frontline nutrition workers manually input data into piles of registers; an all-too-common sight in our different work contexts.

As we strive to end all forms of malnutrition by 2030, there is an urgent need to harness data to track progress, hold stakeholders accountable and foster rapid collaborations. With these challenges in mind, the R4NUT 2021 conference showed measures to anticipate, better understand the drivers and prevent malnutrition through different approaches. ■

1. Alexandre R. Perera, Head of Nutrition | AAH-UK

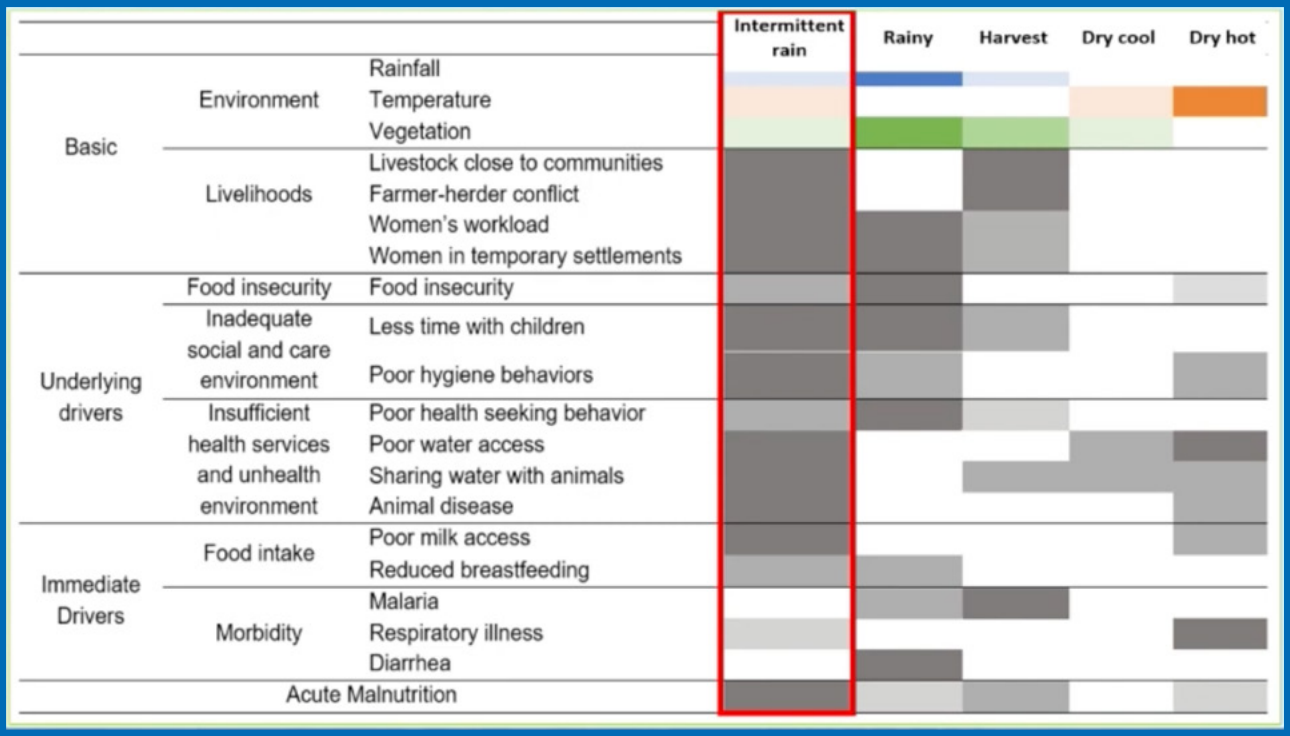


INTEGRATING A PREVENTIVE PACKAGE OF ACTIONS

As the first line of prevention, IYCF practices need to be improved, with a focus on improving complementary feeding by increasing the affordability and accessibility of nutritious foods (including food that is locally available). Meeting global nutrition targets requires concerted efforts to prevent malnutrition, targeting women and children. Prevention should be placed at the centre of our work to reduce prevalence and increase efficiencies. Enhancing the life cycle approach to ensure inclusion of adolescents, pregnant women, breastfeeding women, infants under six months and children 6-59 months in prevention and treatment. Families should be integrated as the target for increase uptake of continuum of care approaches linking treatment to prevention with an emphasis on sustaining recovery, preventing both relapse and all forms of undernutrition[2]. The integration of a preventive package such as peer-based behaviours promotion programmes can quickly and effectively improve health/nutrition behaviours and outcomes.

We should better understand the drivers. While evidence exists to support the framework's identification of (i) insufficient household food security, (ii) inadequate maternal and child care, (iii) insufficient health services and unhealthy environment as the primary underlying causes of acute malnutrition, the specific drivers are often less clear—particularly in areas that experience 'persistent' acute malnutrition—because these three underlying causes and their interaction can have varied relative impacts depending on the local context. Other drivers such as climatic factors (temperatures, vegetation and rainfall) also have an impact on the seasonality of acute malnutrition. Leading to the presence of peaks of acute malnutrition, which may vary in number from one geographical location to another. This is indicative of the specificity of causes of malnutrition per target population given local climatic variability, causing seasonal patterns more in line with local perspectives on seasonality[3]. Policy and programming implication is a recommendation to invest in formative research to capture the seasonality of acute malnutrition and its drivers prior to programme design, which differs across context and livelihood groups. With an understanding of the seasonality of wasting and its drivers, more efficient and effective programmes to anticipate and prevent it will be developed and implemented. ■

2. Sweta Banerjee, Welthungerhilfe India | Multi-sector nutrition programming for sustainable food and nutrition security in rural areas of India, Nepal and Ba - INDIAngladesh: The Nutrition Smart CommUNITIES Approach.
3. Anastasia Marshak | Feinstein International Center, Tufts University | Seasonality of Acute Malnutrition and its Drivers in Sila, Chad.



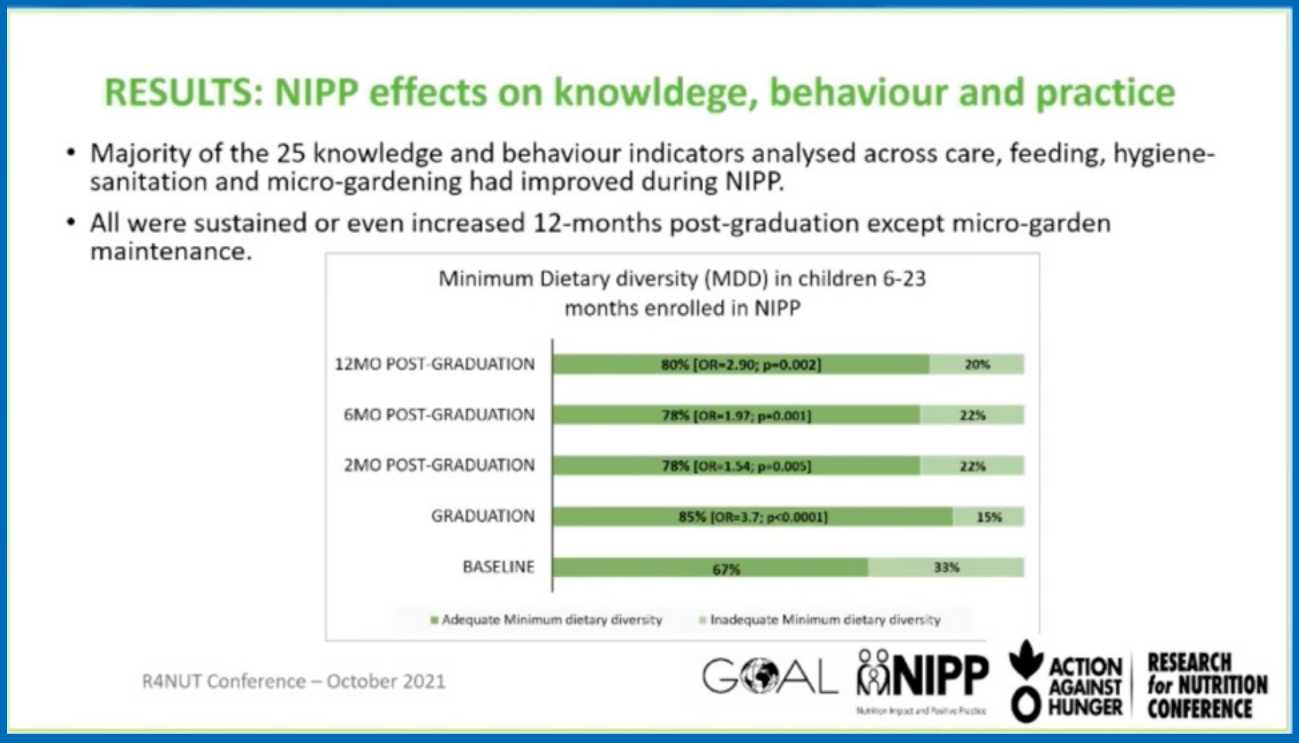
DATA IS POWER FOR DEVELOPING EFFECTIVE SOLUTIONS TO PREVENT MALNUTRITION

Data is power, a critical resource to help us identify deep-rooted nutrition challenges and develop effective solutions to address them. The availability of good data provides a strong foundation for the more important next step; analysis of the information. Improving information systems and nutrition data management is critical. It is important to collect the right type and amount of information and to use it to improve the quality and coverage of services. Promoting data drives accountability; better data, measurement and accountability is essential to facilitate more effective financing for nutrition and to drive equitable progress to ensure we leave no one behind. The availability of analysed information will help to apply systems thinking to sustainably prevent and manage acute malnutrition. Systems thinking is critical to achieve integration and effective coverage. It looks at the whole system instead of a part (or a set of parts). It helps gain insights on interactions, synergies and unintended effects that can be turned into benefits. It also helps long-term and holistic planning, which is essential to promoting sustainability. ■

THE SUPPORT OF GENDER EQUITABLE ROLES HAS A POSITIVE IMPACT ON NUTRITION

Supporting gender-equitable roles and responsibility have a positive impact on mother and child nutrition[4]. Gender inequality can be a cause as well as an effect of hunger and malnutrition. While diverging interpretations of gender exist, there is a common understanding that women and men should have equal rights and opportunities. Women continue to face discrimination and often have less access to power and resources, including those related to nutrition. The roles, priorities, needs and use of resources and effects of nutrition actions may differ between men and women. The tendency is to focus on women when addressing gender, yet this overlooks the instrumental role of men in closing the gender gap. Both men and women need to be involved in this process, acknowledging their respective roles and needs, and fostering mutual awareness and partnership. While addressing nutrition or gender singularly improves nutrition and livelihoods, thus preventing malnutrition, a comprehensive approach can accelerate progress. ■

4. Mebit Kebede, Save the Children | Applying agriculture income pathway to improve diversified consumption of most vulnerable households, experiences of multi-sector nutrition intervention in Ethiopia.

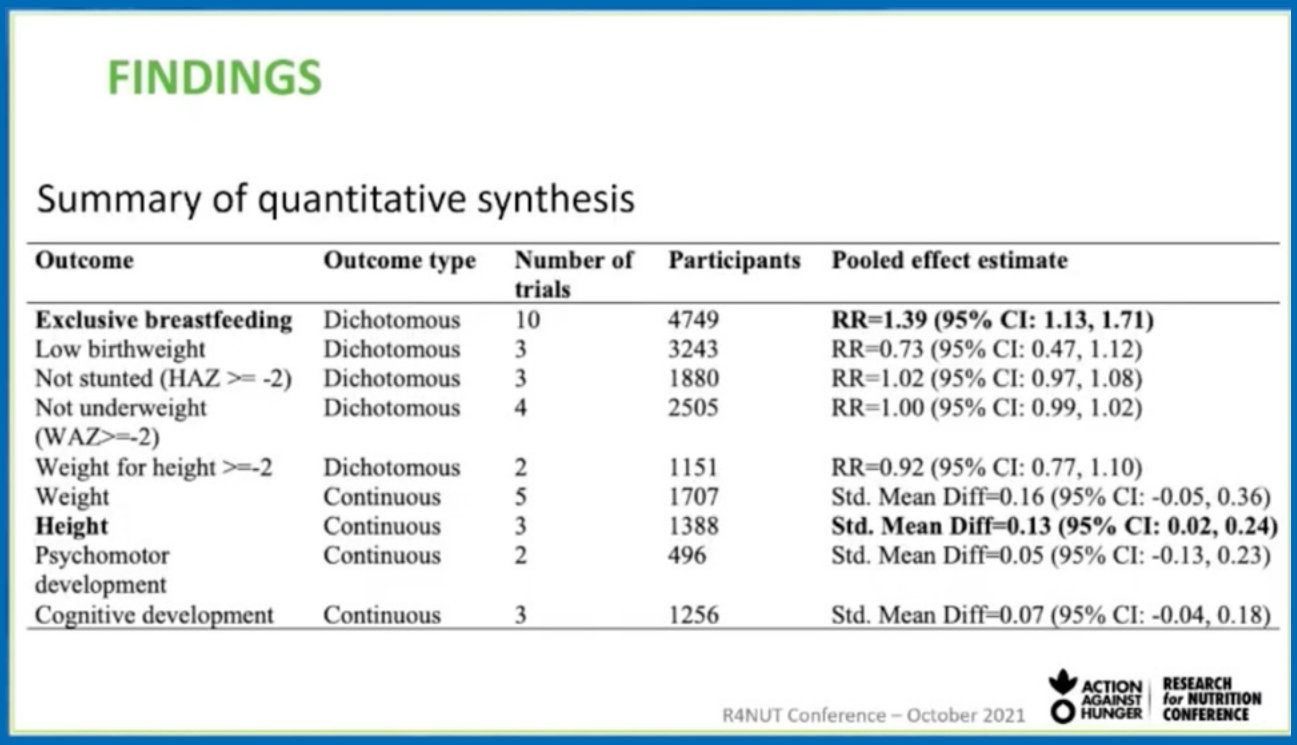


PREVENTION CANNOT BE DISCONNECTED FROM TREATMENT

Prevention is essential to complement treatment competencies and reduce levels of severe malnutrition. Simplified protocols to improve nutrition care scale up within health systems need to articulate a different narrative where prevention cannot be disconnected from treatment, wasting cannot be separated from other forms of undernutrition such as stunting or micronutrient deficiencies, and recovery services cannot be unlinked from others such as growth monitoring. In practice, from presentations[2, 5, 6] that means: i) Investing in health system strengthening while actively supporting Infant and Young Child Feeding (IYCF) programmes; ii) Implementing Nutrition Impact and Positive Practices (NIPP) as a multi-sectoral behavioural change approach supporting the continuum of undernutrition prevention and treatment at community level; iii) Participatory Women's Groups and Home Visits to prevent child undernutrition, working across sectors including health, water, sanitation, hygiene and protection.

Sparse evidence, limited target specificity of drivers of malnutrition in communities and data management are challenges in the anticipation and prevention of malnutrition. The strategies to anticipate and prevent malnutrition are grouped into; adaptation of approaches to each context; strengthening community capacities and resources; community participation and ownership; nutrition and reproductive education; access to safe water, sanitation and hygiene; and advocacy for women's rights.

Current health and nutrition programmes are largely focused on treatment, but this approach needs to be modified to give prevention a more prominent position and to focus on more



FINDINGS

Summary of quantitative synthesis

Outcome	Outcome type	Number of trials	Participants	Pooled effect estimate
Exclusive breastfeeding	Dichotomous	10	4749	**RR=1.39 (95% CI: 1.13, 1.71)**
Low birthweight	Dichotomous	3	3243	RR=0.73 (95% CI: 0.47, 1.12)
Not stunted (HAZ >= -2)	Dichotomous	3	1880	RR=1.02 (95% CI: 0.97, 1.08)
Not underweight (WAZ>=-2)	Dichotomous	4	2505	RR=1.00 (95% CI: 0.99, 1.02)
Weight for height >=-2	Dichotomous	2	1151	RR=0.92 (95% CI: 0.77, 1.10)
Weight	Continuous	5	1707	Std. Mean Diff=0.16 (95% CI: -0.05, 0.36)
Height	Continuous	3	1388	**Std. Mean Diff=0.13 (95% CI: 0.02, 0.24)**
Psychomotor development	Continuous	2	496	Std. Mean Diff=0.05 (95% CI: -0.13, 0.23)
Cognitive development	Continuous	3	1256	Std. Mean Diff=0.07 (95% CI: -0.04, 0.18)

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sustainable, effective and long-lasting strategies. To ensure an optimum holistic perspective, a multi-temporal and multi-sectoral approach in addressing the drivers of acute malnutrition is required. We still have a lot to learn in terms of strategies and approaches to prevent malnutrition given it is a good investment for sustainable impact. ■

Watch Session 2 of #R4NUT2021 here.

5. Marlen Hebie, GOAL | Bridging the continuum of malnutrition treatment and prevention with Nutrition Impact and Positive Practice (NIPP) in Sub-Saharan Africa.
6. Lasater Molly, Johns Hopkins Bloomberg School of Public Health | The effect of maternal mental health interventions on child development in low- and middle-income countries: a systematic review and meta-analysis.

3

TREATMENT OF WASTING
APPROACHES TO IMPROVE EFFECTIVENESS AND COVERAGE

A mother feeding her baby RUTF in Burkina Faso. Ready-to-Use Therapeutic Food (RUTF) is a nutrient-rich, peanut-based paste that helps save the lives of millions of children threatened by acute malnutrition around the world. .

© Jean-Luc Luyssen for Action Against Hunger

THE CHALLENGE IS NOT WHAT BUT HOW

Globally, in 2020, 45.4 million children under the age of 5 were wasted[1]. This number and mortality due to malnutrition were set to increase significantly as a result of COVID-19. Community-based management of acute malnutrition (CMAM) programmes has made it possible to reach more children than in the past. Nevertheless, of the approximately 45 million children under 5 years of age worldwide estimated to experience severe acute malnutrition (SAM), roughly 1 in 3 children receive treatment each year[2]. Gaps in coverage and the persistence of SAM has made identifying strategic methods for expanding access

Saúl Guerrero, Senior Nutrition Advisor – Emergency Nutrition at UNICEF HQ.

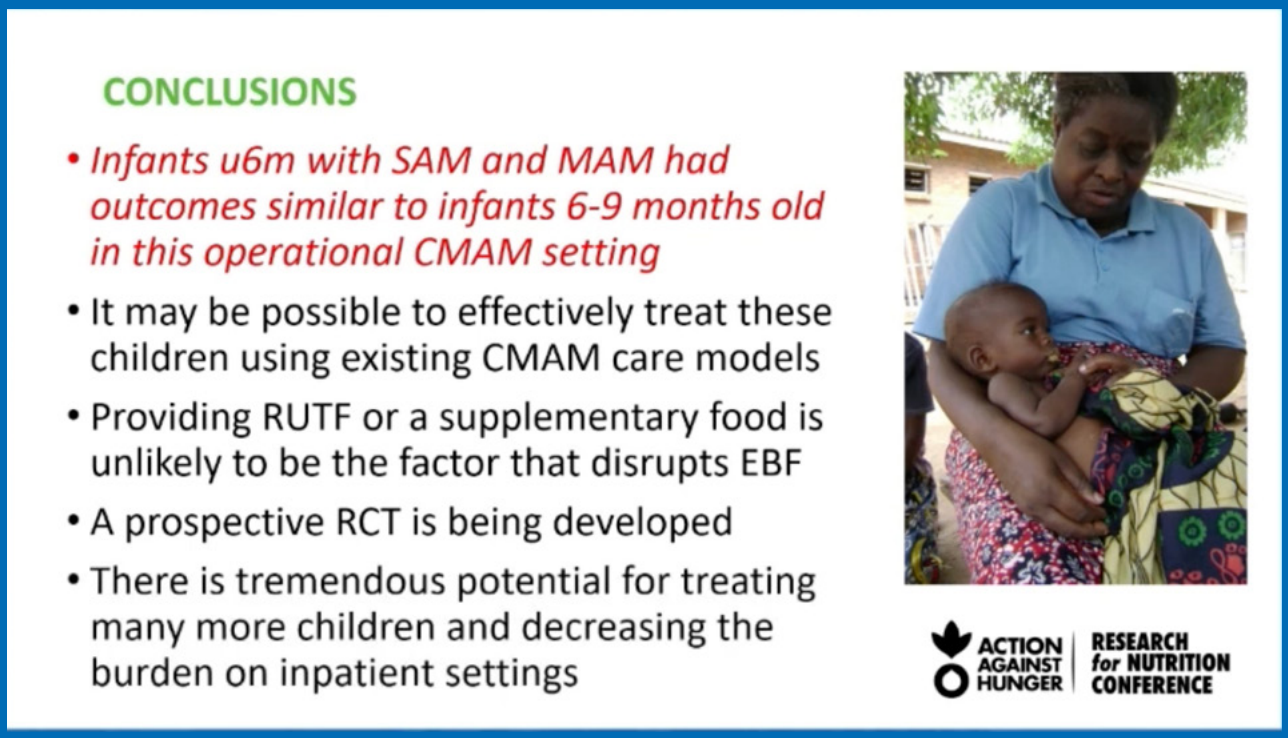
to care, and finding the means to leverage these methods at scale an urgent public health need. In this session, the panel presented approaches to improve effectiveness and coverage of wasting programmes, as well as adaptations in response to COVID-19

1. The UNICEF/WHO/WB Joint Child Malnutrition Estimates (JME), 2021.
2. Dr. Bridget Aidam.

The challenge in SAM treatment is not what, but how. It is critical to reach households and communities[3]. Two decades ago, malnourished children could only receive lifesaving treatment administered by a doctor at a hospital. Now, treatment of acute malnutrition is increasingly moving to communities so that children in remote areas out of reach of traditional health systems can access it through door to door treatment. Ensuring this community-based approach is scaled up globally will require a new level of commitment. We need a paradigm shift; to bring this issue to new audiences, including endorsement for children under 6 months of age[4], and to reach out to the entire global health community. This is a core part of achieving universal health coverage. ■

1 Dr. Bridget Aidam, Director of Technical Services & Innovation – Action Against Hunger, 2 Jeanette Bailey, Nutrition Research and Innovation Lead - International Rescue Committee (IRC), 3 Dr. Talya Shragai, Epidemic Intelligent Services Fellow Centros para el Control y Prevención de Enfermedades (CDC). 4 Suvi T. Kangas, Senior Nutrition Research Coordinator - IRC, 5 Mubarek Abrea, Associate Professor - Jimma University.

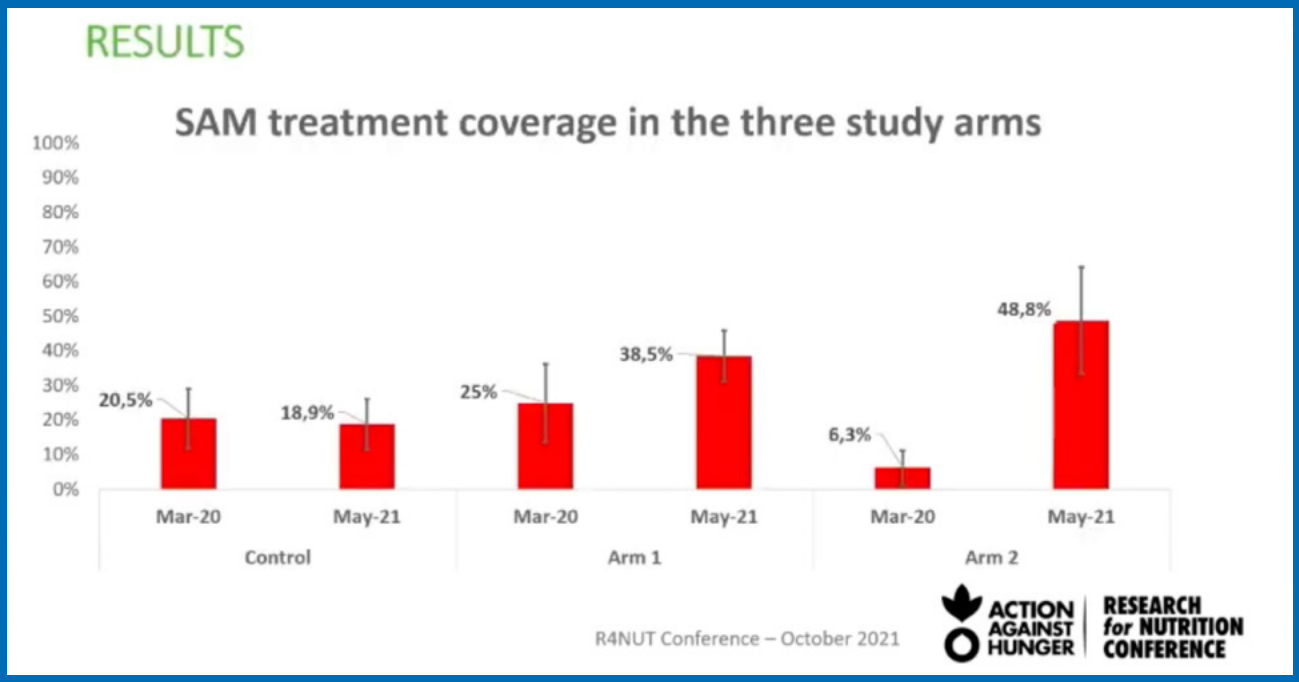
3. Ron Stokes-Walters, Save the Children – AAH | Implementation Research on Linking Community Management of Acute Malnutrition and Integrated Community Case Management: Operational Implications for Community Health Worker-provided treatment.
4. Indi Threan, Departments of Pediatrics, Global Health and Epidemiology. University of Washington | Community-Based Management of Acute Malnutrition for Infants Under 6 Months of Age Is Safe and Effective.



THE INSTRUMENTAL ROLE OF CHWS FOR BOOSTING ACCESS TO ESSENTIAL NUTRITIONAL CARE

To improve access and coverage of nutrition treatment programmes on a larger scale, global and national nutrition policies need to support treatment of severe acute malnutrition by Community Health Workers (CHWs). The current CMAM guidance is built around health facilities and isn't well designed for serving people living in places where health infrastructure is weak or access is limited. Evidence is available and needs to be complemented by advocacy with national governments, international agencies and donors to include malnutrition treatment delivery by Community Health Workers as an option, particularly in access-constrained environments. Integrated Community Case Management (iCCM) is a strategy that aims to improve access to essential health services by training, supporting and supplying community health workers (CHWs) to diagnose and treat multiple illnesses in children under five years old[5]. The general objective is to increase the proportion of Severe Acute Malnutrition children treated by transforming the current service delivery model. ■

5.Dognon Abdias Ogobara, AAH | Increasing coverage of acute malnutrition treatment with Community Health Workers using a modified protocol in a humanitarian context.



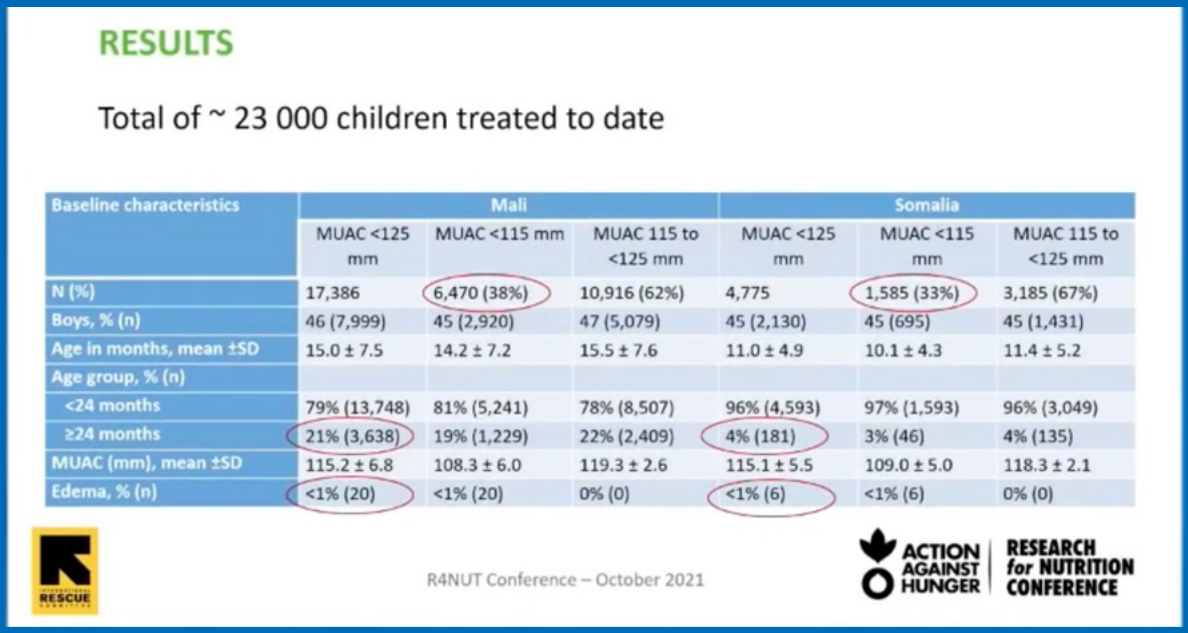
THE CONTINUUM OF NUTRITIONAL CARE

Simplified protocols to improve nutritional care scale up within health systems needs to articulate a different narrative where prevention cannot be disconnected from treatment, wasting cannot be separated from other forms of undernutrition such as stunting or micronutrient deficiencies and recovery services cannot be unlinked with others such as growth monitoring[6]. A major challenge faced is that of transition between services and approaches. The approach of malnutrition has largely been through distinct programmes from acute to chronic; from severe to moderate; from complicated to uncomplicated; from prevention to treatment; from specific to sensitive interventions.

Combined/simplified approaches are being piloted in several countries and show promise as to their effectiveness [6, 7]. However, there is not yet sufficient evidence to make policy changes on simplified approaches for treating acute malnutrition, but that simplified approaches could be considered in certain circumstances such as; severe food insecurity, very weak health systems and/or extreme vulnerability, including in the context of infectious disease pandemics. A continuum of care for malnutrition requires aligned and comprehensive policies and programming to ensure adequate and accessible services to meet nutritional needs. This will imply that any child receives appropriate nutritional care through more than one programme, requiring coherent and effective transition between services.

In many LMICs countries, the majority of children who have severe acute malnutrition are never brought to health facilities.

6. Jeanette Bailey, International Rescue Committee – LSHTM | A simplified, combined protocol versus standard treatment for acute malnutrition in children 6–59 months (ComPAS trial): A cluster-randomized controlled non-inferiority.
7. Suvi T. Kangas, International Rescue Committee | Effectiveness of acute malnutrition treatment with a simplified protocol in Mali and Somalia.



RESULTS

Total of ~ 23 000 children treated to date

Baseline characteristics	Mali			Somalia		
	MUAC <125 mm	MUAC <115 mm	MUAC 115 to <125 mm	MUAC <125 mm	MUAC <115 mm	MUAC 115 to <125 mm
N (%)	17,386	6,470 (38%)	10,916 (62%)	4,775	1,585 (33%)	3,185 (67%)
Boys, % (n)	46 (7,999)	45 (2,920)	47 (5,079)	45 (2,130)	45 (695)	45 (1,431)
Age in months, mean ±SD	15.0 ± 7.5	14.2 ± 7.2	15.5 ± 7.6	11.0 ± 4.9	10.1 ± 4.3	11.4 ± 5.2
Age group, % (n)						
<24 months	79% (13,748)	81% (5,241)	78% (8,507)	96% (4,593)	97% (1,593)	96% (3,049)
≥24 months	21% (3,638)	19% (1,229)	22% (2,409)	4% (181)	3% (46)	4% (135)
MUAC (mm), mean ±SD	115.2 ± 6.8	108.3 ± 6.0	119.3 ± 2.6	115.1 ± 5.5	109.0 ± 5.0	118.3 ± 2.1
Edema, % (n)	<1% (20)	<1% (20)	0% (0)	<1% (6)	<1% (6)	0% (0)

RESCUE

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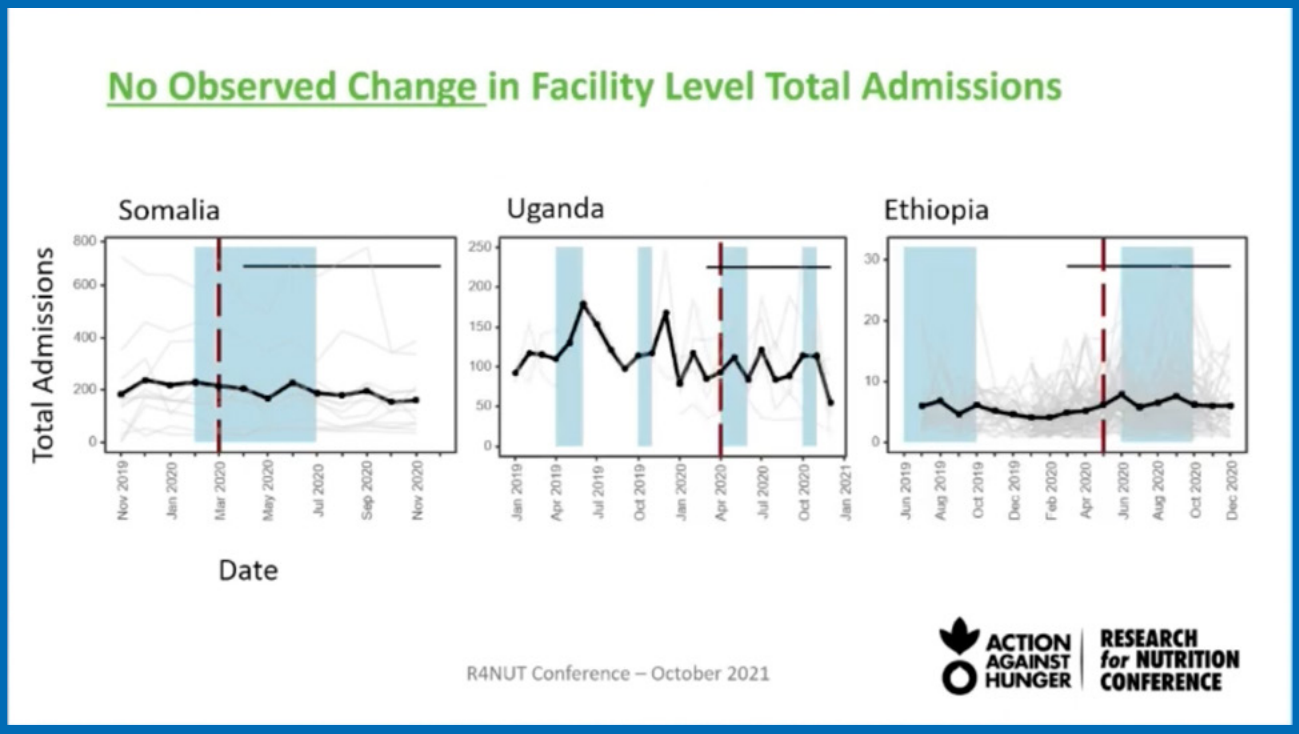
In these cases, only an approach with a strong community component can provide them with the appropriate care[8]. The continuum of nutritional care at community level become critical for early diagnosis and provide nutritional care of people where they are, empowering communities and mothers, letting them actively participate. Taking in consideration context barriers, gender issues and cultural determinants. ■

COVID-19 IMPLICATIONS FOR CMAM PROGRAMMES

Guidelines[9,10], were released for CMAM programmes to adapt their protocols at the start of the COVID-19 pandemic, with the goal of reducing COVID-19 transmission while keeping the programmes running. These suggested adaptations included various changes to simplify protocols and reduce staff-to-family contact. As a preliminary indication, overall CMAM programmes do not experience consistent, significant changes in programme admission and treatment indictors after implementing adaptations: important implications for CMAM programmes, as these simplified protocols may be able to treat childhood malnutrition as effectively as traditional protocols[11]. This could impact how CMAM programmes will design their activities in the short term to continue to mitigate COVID-19 transmission as well as possible simplification of protocols in the long term to maximize utilization of resources while maintaining programme efficacy. ■

8. Dognon Abdias Ogobara, AAH | Increasing coverage of acute malnutrition treatment with Community Health Workers using a modified protocol in a humanitarian context.
9. UNICEF and World Health Organization. Prevention, Early Detection and Treatment of Wasting in Children 0-59 Months through National Health Systems in the Context of COVID-19. New York: UNICEF; 2020.
10. UNICEF GNC, Global Technical Assistance Mechanism for Nutrition (GTAM) Management of child wasting in the context of COVID-19. 2020.
11. Talya Shragai, Centers for Disease Control and Prevention | Impact of programmatic adaptations to treatment of acute malnutrition protocols in the context of the COVID-19 pandemic on nutritional outcomes.



THE TREATMENT OF SEVERE ACUTE MALNUTRITION IS NOT JUST ABOUT NUTRITION

The persistence of acute malnutrition as the most visible type of malnutrition, carrying the highest risk of death. This calls for new solutions and ways of working to accelerate prevention, early detection, and treatment efforts to address child wasting more effectively. The treatment of severe acute malnutrition is not just about nutrition, it must be part of an integrated health policy to achieve universal health coverage, along with enhancing the life cycle approach to ensure inclusion of adolescents, pregnant women, breastfeeding women, infants under six months and children 6-59 months in prevention and treatment. Given the importance of quality evidence for effective interventions, robust and new research in key areas remains a priority, but the generation, compilation and sharing of data on operational effectiveness is equally critical. ■

Watch Session 4 of #R4NUT2021 here.

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CONCLUSION
TRANSFORMING COMMUNITY CAPACITIES INTO LOCAL SOLUTIONS

A mother receiving nutritional supplements for her baby, which Action Against Hunger delivered to vulnerable families with minors under 5 years old as part of their Food Security Program in Matam (Senegal).

THE CHALLENGE IS STILL PENDING: PREVENTION, EARLY DETECTION AND TREATMENT OF ACUTE MALNUTRITION CAN ONLY BE CONQUERED TOGETHER

In the last few years, we have seen marginal progress in the ability to reduce the number of children who are wasted. This number is however set to increase by 9 million due to COVID-19[1]. Making wasting an even bigger problem than it was already, owing to its associated high risk of mortality. Prevention, early detection, and treatment of acute malnutrition has many challenges which can only be conquered together[2]. Understanding and addressing these challenges for more efficient and sustainable action, how can we build and move forward better together?

The multisector nature of nutrition needs research focused on the interconnection between food systems and nutrition, health and nutrition, biodiversity and nutrition, etc. Focusing not only on the latest findings in nutrition, but also on how can we interconnect with the other fields because very often nutrition is looked at from the angle of health solely? However, nutrition is not a matter of health alone, and if it is only looked at from this perspective, interventions are always too late, focused on the cure and not on prevention[3]. Recommendations and potential solutions for this can become part of the system in a country, be it in policy, legislation, local level of institutions, etc., anchored in a systemic approach.

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Prevention is the starting point. How to keep progressing in involving communities is key. What is the reason for the persistence of acute malnutrition, and why do we still not see optimal, lasting and stable results? Taking a retrospective and analytical look at the contexts where child undernutrition predominates and evaluating with scepticism the strategies implemented so far brings us closer to the first key: nutrition and health programmes based on prioritising treatment, despite their effectiveness, are not enough. The low coverage of treatment puts prevention in a position of relevance in combating wasting.

Preventing and reducing acute malnutrition requires that children are born to healthy, well-nourished mothers who receive adequate antenatal care and live in households with access to appropriate feeding

1. UNICEF, 2020.
2. Ellen Barclay | Head Secretariat SUN.
3. Gerda Verburg | Coordinator of Scaling Up Nutrition (SUN).

and care practices, as well as quality primary health care, safe water, sanitation and good hygiene. This is especially critical during the window of opportunity of the first 1000 days, but remains vital throughout the life cycle. Healthy children become healthy adolescents, adults and parents.

It is clear that action plans against acute malnutrition need to reposition prevention more prominently and integrate it with treatment. To move towards this shift in approach and set a new direction for nutrition programmes, we identify several key issues to be addressed: (1) Simplify the diagnosis and treatment of acute malnutrition to facilitate accessibility and coverage (2) Facilitate access to water, sanitation and hygiene services (3) Tailor action plans to each particular context according to its needs and issues (4) Increase nutrition education and knowledge of the aetiology of acute malnutrition (5) Promote research to develop effective evidence-based prevention strategies (6) Promote gender equality and women's empowerment (7) Encourage increased long-term funding for the prevention and treatment of acute malnutrition (8) Improve coordination among different administrations, ministries and local leaders for more successful comprehensive prevention and treatment strategies. ■

Nicole Dossou, Director of Laboratoire de Recherchre en Nutrition et Alimentation Humaine - UCAD.

THE WAY FORWARD: FROM EARLY DETECTION TO OPTIMAL TREATMENT MODELS.

Over the past 20 years, advances in the form of diagnostics, protocols and nutritional products for the recovery of the malnourished have enabled the implementation of community-based treatment strategies, increasing the coverage and impact of nutritional treatment strategies. But despite this, acute malnutrition continues to threaten the lives of millions of children under five with no access to treatment. Although coverage of treatment services has increased steadily since 2010, the proportion of acutely malnourished children accessing treatment remains unacceptably low, with only one in three severely wasted children receiving treatment.

Early detection of malnutrition is the future. In many countries, nutrition only starts to be a challenge once there is already malnutrition. By using appropriate criteria to measure acute malnutrition at scale using low cost technology and simpler approaches, detection can be faster and early[4]. The challenges of increasing programme coverage generally have as the starting point lack of an easy, quick and reliable diagnosis. Integrating innovative digital solutions and new techniques (such as geometrical morphometry) have a great potential for strengthening local and

community capacities for effective screening and diagnosis of child undernutrition and improved nutritional data management. Similarly, new approaches for quick nutritional diagnosis and the integration of new technologies could revolutionise routine epidemiological monitoring of malnutrition and community based surveillance systems. However, the goal to strive for in nutritional diagnosis is to minimise the inclusion and exclusion errors of at risk children to optimise resources used while maintaining effective criteria and tools.

Optimal treatment models which are simpler, more efficient and prioritise high risk target populations (centred child health approach)[5]. This is to be ideally combined with early detection for a significant impact on the fight against acute malnutrition. The main challenge in treatment is how gaps in coverage and the persistence of SAM has made identifying strategic methods for expanding access to care, and finding the means to leverage these methods at scale an urgent public health need. A strategy for this is training, supporting and supplying community health workers (CHWs) to diagnose and treat SAM in children in places where health infrastructure is weak or access is limited. Managing malnutrition requires aligned and comprehensive policies and programming to ensure adequate and accessible services to meet nutritional needs. Therefore, combined/simplified approaches are required with a community component[6] which will optimise the continuum of care so any child receives appropriate nutritional care through more than one programme, requiring coherent and effective transition between services. ■

KEY MESSAGE: BOTH PREVENTIVE AND CURATIVE NUTRITIONAL INTERVENTIONS ARE NEEDED

Acute malnutrition is an urgent global public health problem that threatens the lives of millions of children under five. Most research on the management of acute malnutrition focuses on demonstrating the efficacy of nutritional supplements for prevention and treatment, but there is a need to broaden the field of research and go beyond the commodity. In addition, current nutrition and health strategies place treatment at the centre of interventions, giving it priority in addressing acute malnutrition when, however, preventing child undernutrition is more effective than treating it. Nutrition and health programmes need to champion the importance of prevention and integrate it with treatment, making them two inseparable parts, so that prevention covers the treatment bias.

In order to reduce the prevalence of acute malnutrition, we must redefine current preventive strategies by integrating four key approaches: early identification, context-specific adaptation, community participation and capacity building, and women's empowerment. The ultimate goal of prevention is to provide communities with access to opportunities that enable them to progress and build resilience, and this requires a commitment to prevention interventions that, while not immediately effective, are more sustainable and effective than product-based quick fixes.

More needs to be done. Informed and targeted choices focused on action made to prevent and treat malnutrition[7]. In this sense, efforts are needed to (i) analyse the specific drivers of persisting forms of malnutrition, particularly acute malnutrition cases, in each context (ii) tailor strategies and document simplified and effective approaches (iii) harness data to track progress, hold stakeholders accountable and foster rapid collaborations. ■

4. Nicole Dossou | Director of Laboratoire de Recherche en Nutrition et Alimentation Humaine -UCAD. Senegal
5. Dr Kirrily de Polnay | WHO.
6. Dr. Matie | Director del Programa Nutricional Nacional – Ministerio de Sanidad de Senegal.
7. Saul Guerrero | Senior Nutrition Advisor - Emergency Nutrition at UNICEF HQ.

ABOUT #R4NUT CONFERENCE

R4NUT was launched in 2016 to offer a personalised and specialised space where the latest research findings on the prevention, diagnosis and treatment of malnourished children can be shared and discussed.

The conference brings together all the evidence generated in field experience, research projects, strategic guidelines or policies and nutrition and health programmes to strengthen both the knowledge and capacities of professionals from around the world involved in the fight against malnutrition.

Four editions of #R4NUT have been held so far. The 2016 and 2017 in Paris, 2019 in Nanterre (France) and 2021 which was online.

#R4NUT 2016

#R4NUT 2017

#R4NUT 2019

All the information from previous conferences HERE.

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