NO TIME TO WASTE
INVESTMENT PRIORITIES TO END MALNUTRITION IN CHILDREN

Almost 50 million children under five are wasted today, with 14 million wasted children in Africa and almost 34 million wasted children in Asia\(^1\). With less than 20 per cent of children in need of treatment receiving it\(^ii\), and limited progress on effective prevention at scale, the global burden of wasting has largely stagnated over the years\(^iii\). Not only are we failing to prevent this life-threatening form of malnutrition from occurring in the first place, we are also failing to ensure that those who currently suffer from wasting, have access to safe and effective treatment.

No Wasted Lives is a coalition of partners who envision a world where no child suffers or dies from wasting. The goal of the Coalition is to support the Sustainable Development Goals (SDG), which incorporates the World Health Assembly target to reduce and maintain wasting to less than five per cent by 2025. Recognising that the effects of malnutrition are far-reaching across the health and wellbeing of children, the successes made today for wasting will be critical to achieve the SDGs to end preventable child deaths, and ensure health, progress, and opportunities for all children by 2030.

Building our knowledge of what works to effectively prevent wasting, and accelerating action to reduce the global burden is critically important. Preventing new cases of wasting is critical to reducing the high global burden, and could potentially be more cost-effective than treating it\(^iv\). However, recognising the significant global burden that exists today, we also need to ensure that all children who suffer from wasting have access to life-saving treatment. We have the knowledge, solutions and experiences at our fingertips to do this.

We can do more. We can do better together. Here’s why, and here’s how.
WASTING
AND WHY WE SHOULD CARE

Wasting threatens the lives of millions of children every year, leaving them in a vicious cycle of malnutrition, disease, vulnerability, and poverty. This specific form of malnutrition alone is an underlying cause of an estimated 800,000 child deaths annually\(^4\), or over 2,000 deaths every single day. However, mortality alone is not the only concern: malnourished children are more likely to get sick and to suffer detrimental consequences on healthy growth and development during critical formative years\(^4\).

Ensuring that all children affected receive the treatment they need is not only a crucial part of global efforts to meet the Sustainable Development Goals, it is an ethical imperative. Furthermore, scaling up treatment of wasting is a good investment. It has been estimated that the scale-up of treatment of severe acute malnutrition (SAM) would result in at least $25 billion in increases in economic productivity over the productive lifetimes of children who benefited from the programme, and each dollar invested in treatment would result in at least $4 in economic returns\(^3\).

EFFECTIVE, LIFE-SAVING TREATMENT FOR WASTING EXISTS

However, limited availability and access to treatment has undermined its potential impact on wasting and children’s health and development. Over the past four decades, significant advances have been made in the treatment of SAM. The development of therapeutic milks in the early 90’s enabled successful inpatient treatment. Inpatient treatment, however, was resource-intensive. The development of ready-to-use therapeutic foods a few years later enabled a safe and effective community-based approach to treatment. This approach further reduced mortality rates, treatment costs, and improved coverage relative to inpatient care\(^iv\). Yet, less than 20 per cent of children affected by wasting currently receive the treatment they need\(^v\) because services are inaccessible or unavailable. Treatment services need to be brought closer to the communities and scaled-up to ensure that no child is left behind.

INSUFFICIENT AND SHORT-TERM FUNDING PREVENTS PROGRESS

Funding falls dramatically short of projected needs to scale up treatment of wasting. In 2015, an estimated $224 million was spent on treatment of SAM\(^5\). Estimated funding needs to scale up treatment for SAM are $9.1 billion over 10 years\(^3\). While estimates for costs to treat moderate acute malnutrition (MAM) are less precise, an estimated $3.6 billion a year is needed to treat moderate acute malnutrition\(^6, vi\).

Wasting and other forms of malnutrition are closely linked and can coexist in the same person\(^7\), yet efforts to address different types of malnutrition are siloed across distinct pathways. Even though a significant number of wasted children live outside of humanitarian settings, wasting has historically been treated predominantly as a humanitarian issue, which has meant that treatment programmes were supported and largely driven by international NGOs and humanitarian players, and reliant on short-term funding\(^vii\). This has limited long-term planning and financing to support the full integration of treatment programmes into the health systems, and limited access and availability of treatment. Integration into health systems not only ensures routine treatment is available, but also ensures systems and structures are able to respond quickly to surges in demand due to seasonal patterns, or when an emergency does occur.
To truly address malnutrition in all of its forms, funding can no longer be siloed and must include both development and humanitarian sector investments for wasting and stronger links to existing health and nutrition resources. Wasting not only exists outside of emergency and humanitarian environments, but is also linked to stunting, a form of malnutrition recognised and accepted as a development issue. Like the funding for stunting efforts, we must ensure long-term, development-focused funding for wasting, given the urgent and ever-present need.

AFFORDABLE SOLUTIONS FOR BETTER ACCESS TO TREATMENT ARE WITHIN REACH

All children who suffer from wasting should have access to treatment. Innovative, safe, and customised approaches could address some of the availability and access issues, making limited resources go further in order to reach more children. In recent years, the No Wasted Lives Coalition and partners have developed and tested simplified approaches for treatment, and modified delivery mechanisms that have the potential to enable earlier detection and more cost-effective treatment closer to the communities. By continuing to generate evidence and learning on innovative approaches, we can achieve better coverage of safe, effective, and affordable treatment. More children can and must have access to life-saving treatment.

INNOVATIONS IN ACUTE MALNUTRITION TREATMENT

1 INNOVATION:
FAMILY MUAC

THE PROBLEM: As a result of low treatment coverage, acute malnutrition is often detected late, once the child has been malnourished for a while or is already severely malnourished. Treating acute malnutrition successfully becomes more difficult and costly the later it is identified.

THE IDEA: Train caregivers in the detection of acute malnutrition using mid-upper arm circumference (MUAC) tape (known as Family MUAC) to enable earlier detection, earlier treatment and ultimately increased treatment coverage.

WHAT WE KNOW SO FAR, AND WHAT MORE IS NEEDED: Evidence from a study in Niger indicates that caregivers are able to safely detect malnutrition in children, resulting in earlier admission and fewer hospitalisations. The Family MUAC approach is now widely used in over a dozen countries as a key component to support early detection and community engagement. More operational evidence is needed, particularly on the combination of Family MUAC and simplified approaches to treatment innovations, and the integration of acute malnutrition treatment into iCCM.
2 INNOVATION:
SIMPLIFIED APPROACHES AND OPTIMISED DOSAGE OF READY-TO-USE THERAPEUTIC FOODS (RUTFs)

THE PROBLEM: Acute malnutrition is a continuum, yet moderate and severe acute malnutrition are treated separately, with different protocols and by different organisations resulting in inefficient and costly systems. Ready-to-use foods (RUTFs) are a costly component of treatment and supply shortages are not uncommon, limiting the availability of treatment for both MAM and SAM.

THE IDEA: Test alternative treatment protocols, combining SAM and MAM treatment by treating it as one condition with one treatment product, in one programme, utilising one supply chain with an optimised dosage of RUTF. This approach may reduce the incidence of SAM in addition to reducing morbidity and mortality. Optimised dosage will make current supplies go further and reduce treatment costs.

WHAT WE KNOW SO FAR, AND WHAT MORE IS NEEDED: A study in Sierra Leone has demonstrated that integrated treatment of SAM and MAM with one product, RUTF, at an optimised dosage is an acceptable alternative to standard care. Other studies testing simplified approaches, including optimised dosage of RUTF, are ongoing, with results expected in 2019. If proven effective, more programmatic evidence will be needed across contexts and from large scale operational pilots to build the evidence on effectiveness and cost-effectiveness in new contexts.

3 INNOVATION:
INTEGRATION OF SAM TREATMENT INTO A BASIC PACKAGE OF CARE PROVIDED BY COMMUNITY HEALTH WORKERS (CHWs)

THE PROBLEM: Long distances to health facilities are a common barrier to access to SAM treatment. This limits the treatment coverage of traditional facility-based treatment, even with the outpatient treatment model.

THE IDEA: The inclusion of SAM treatment into the package of health interventions provided in the community by CHWs has been proposed to bring treatment closer to the communities, improve access and increase coverage.

WHAT WE KNOW SO FAR, AND WHAT MORE IS NEEDED: Studies have shown that with the right training, CHWs can identify and treat uncomplicated cases of SAM, achieving cure rates above the minimum standards, reduced default rates and improved coverage. Evidence to date is limited, however, and results are likely to be context-specific. More studies testing feasibility in different contexts as well as large operational studies to ensure results can be maintained at scale are needed.
IN ORDER TO ENSURE THAT NO CHILD SUFFERS OR DIES FROM WASTING, THE NO WASTED LIVES COALITION CALLS FOR MULTI-SECTORAL AND SUSTAINABLE INVESTMENT IN PEOPLE, SYSTEMS, AND SERVICES.

1. INVESTMENT IN PEOPLE

Investment in people who are living in and working with affected communities is key for timely identification of wasting, and to ensure availability and accessibility of affordable prevention and treatment services.

This includes:

- Mobilising communities and community-leadership to recognise wasting as a priority, and demand treatment and prevention for their children;
- Building the capacity of, and empowering families and communities to detect acute malnutrition. Earlier detection will lead to improved treatment outcomes, preventing deterioration into the most severe and deadly forms. See Innovation 1 on detection in the community;
- Training community health workers in both the diagnosis and treatment of acute malnutrition as part of the standard community health package. This will bring treatment one step closer to the communities in need and helps overcome barriers to access and delivery. See Innovation 3 on integration with health services.

2. INVESTMENT IN SYSTEMS

Investment in stronger systems is key to ensuring the essential platforms and mechanisms are in place to support cost-effective and sustainable delivery of prevention and treatment services at scale, especially as countries define and pursue their pathways to achieving Universal Health Coverage\textsuperscript{viii}.

This includes:

- Building national health systems capacity to integrate prevention and treatment for wasting as a basic health service delivered at community, outpatient and facility-levels;
- Providing technical inputs to strengthen and diversify the supply chain for treatment products for all forms of acute malnutrition to make them more efficient, cost-effective, and reactive to surges in demand;
- Expanding local production and quality assurance for treatment products, with options for alternative formulations using highly nutritious and safe local ingredients;
- Supporting the development of national and sub-national policies, ensuring they are based on the latest evidence, and provide clear cross-sectoral guidance on effective management of acute malnutrition within humanitarian and development contexts;
- Integrating wasting related indicators into the national health information systems as well as ongoing research and programmes to optimise existing systems to understand wasting better.
3. INVESTMENT IN SERVICES

Investment in services for children with wasting as part of their basic right to health care is essential. It is critical that we continue to use the latest available evidence to ensure that all prevention and treatment services are effective and affordable in order to support delivery at scale.

This includes:

- Investing in evidence-generation on what works to effectively prevent wasting at scale and across contexts to support accelerated efforts. Recognising the limited evidence available, this is critical to ensure prevention efforts are both effective and cost-effective;

- Supporting uptake and use of new evidence to provide a range of viable, cost-effective treatment options that can be easily adapted to different contexts, and can be implemented at scale. While a lot is already known on how to effectively treat acute malnutrition, more evidence is needed to provide an expanded set of treatment options that will ultimately be able to reach more children. See the Innovations on pages 3 and 4 for more information about innovations in wasting treatment, including:
  
  - Integration of health and nutrition programming: Evidence suggests that if done well, it can have a positive impact on both nutrition and health outcomes. One example of integration of nutrition and health is the integration of acute malnutrition treatment into the package of interventions provided by community health workers (see Innovation 3).
  
  - Use of simplified approaches to treatment (see Innovation 2);

- Ensuring technical assistance through existing mechanisms are fully accessible and utilised by governments and country-level partners to support scale-up of evidence-based and high-impact acute malnutrition prevention and treatment services (in both development and humanitarian settings).

ABOUT NO WASTED LIVES

No Wasted Lives is a coalition of multi-sectoral partners who envision a world where no child suffers or dies from wasting. No Wasted Lives was launched to accelerate collective action for children affected by wasting by 2020. The founding members of the Coalition are Action Against Hunger, Children’s Investment Fund Foundation (CIFF), European Commission (ECHO), International Rescue Committee (IRC), innocent foundation, United Kingdom Department of International Development (DFID), United Nations Children Fund (UNICEF) and World Food Programme (WFP). More information can be found at: www.nowastedlives.org
ENDNOTES AND REFERENCES

ENDNOTES

i. The number of children suffering from wasting and who require treatment every year is likely to be far higher than the 49.5 million as this number only accounts for prevalence, which counts the number of children who are wasted at one specific time in the year and does not account for new cases, throughout the year. Work to determine incidence factors is currently underway, which will enable a better understanding of the annual caseload. The number is even higher if the case definition of acute malnutrition is considered which in addition to children with wasting, (children with a low weight-for-height z-score), includes children with a mid-upper arm circumference below > 125mm or bilateral pitting oedema who also qualify for treatment.


iii. 51.5 million children wasted in 2011 and 49.5 million children wasted in 2018.

iv. Between 2009 and 2017 the number of children increased four-fold from 1.1 to 4.4 million

v. This number is likely much lower if annual caseloads are considered.

vi. More up-to-date analysis does not include the costs or impacts of treating moderate acute malnutrition because the evidence base and World Health Organization (WHO) guidelines for treatment are lacking.

vii. In 2015, 40 per cent of funding to the treatment of acute malnutrition was disbursed as humanitarian aid. Of all the WHA nutrition targets, wasting had the largest share of funding disbursed as humanitarian aid.

viii. Universal health coverage (UHC) means that all people and communities can use the promotive, preventive, curative, rehabilitative and palliative health services they need, of sufficient quality to be effective, while also ensuring that the use of these services does not expose the user to financial hardship.

REFERENCES


