

NEEP INFORMATION BRIEF NO. 2

Water, Sanitation and Hygiene and Child Nutrition

Exploring connections through programme evaluations

The Nutrition Embedding Evaluation Programme (NEEP) is a four-year project led by PATH and funded by the United Kingdom Department for International Development, concluding in 2017. NEEP was designed to build the evidence base for what works in improving nutrition by conducting credible, robust evaluations of innovative interventions implemented by civil society organisations.

NEEP interventions fall under one or more thematic areas: 1) agriculture (5 grantees); 2) cost-effectiveness analysis (4); 3) early childhood development (5); 4) infant and young child feeding (10); 5) micronutrients (6); 6) water, sanitation and hygiene (5); 7) women's empowerment (8); and 8) e-learning (1). This brief is focused on water, sanitation and hygiene, and how these approaches can be leveraged to improve child nutrition.

WASH AND CHILD NUTRITIONAL OUTCOMES

For decades, nutrition experts have associated adequate water, sanitation and hygiene (WASH) with positive child health and nutrition outcomes. Prior to issuing the Nutrition Embedding Evaluation Programme (NEEP) call for applications, PATH conducted a gap analysis to identify high-priority areas for investment in evidence building for nutrition. PATH found that nutrition-sensitive interventions have thus far been unable to produce strong evidence to support the link between WASH and nutrition.¹ Although it is not uncommon for nutrition programmes to include WASH components, evaluation methods have not been rigorous enough to conclusively demonstrate their impact.

WASH and nutrition are intimately related and create a self-reinforcing cycle, especially visible in low-resource environments. Children who lack access to clean water and adequate sanitation frequently contract diarrhoeal diseases, leading to increasing dehydration and malnourishment. Malnourished children have weakened immune systems, which makes them more susceptible to disease. In contrast, well-nourished children are less likely to get diarrhoea.²

Several NEEP grantees—including ACTED (Pakistan), Action Against Hunger | ACF International (ACF, Chad), Evidence Action (Kenya), and Hellen Keller International (HKI, Bangladesh)—have incorporated WASH activities, such as hygiene education and product distribution, into their programmes. The approaches and contexts vary widely, but the goals are the same: address WASH as an underlying



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determinant of nutrition and improve overall child health in target populations. By integrating WASH into their nutrition programme designs and evaluations, these civil society organisations will help to close the evidence gaps for successful implementation of nutrition-sensitive interventions in WASH sectors.

CREATING MORE SANITARY ENVIRONMENTS

In Chad's Kanem Region, chronic food insecurity, drought, poor access to health care and lack of clean water have contributed to alarming rates of acute malnutrition. At the household level, an unhygienic environment and unsanitary childcare practices have been shown to increase diarrhoeal incidence and may also lead to tropical intestinal infections, which are precursors to poor growth and undernutrition.

To address these problems, ACF Chad provided a household WASH package—including soap and a water treatment and storage kit—to families of children in an outpatient treatment programme for severe acute malnutrition. Through their evaluation, ACF aims to learn whether intervention participants are at less risk of relapsing, and if they have better outcomes in terms of weight gain and length of stay than non-participants in the same outpatient programme.

ACTED tested a similar approach, with additional components, in Pakistan—where malnutrition directly or indirectly causes the deaths of nearly 300,000 infants and children every year.³ Along with hygiene kits and training, ACTED provided improved shelter, water pumps and cash grants to vulnerable households in three different intervention groups (shelter only, shelter + WASH and shelter + WASH + cash). By comparing various health outcomes—including incidence of water-borne diseases, dietary diversity and food consumption scores—of children in the various intervention arms with children in a control group, ACTED could assess the effectiveness of several multisectoral approaches at once. Ultimately, the study demonstrated that a multisectoral approach had positive effects on nutrition-related behaviours.

“We can conclude that a multisector response, particularly one including a WASH component, can indeed be effective in alleviating nutrition problems by inducing better, more hygienic everyday practices within its beneficiaries.”⁴

ACTED, 2017

COMMUNITY EDUCATION FOR HEALTHIER BEHAVIOUR

In rural western Kenya, the population suffers from high levels of HIV, diarrhoea, malaria, tuberculosis and other preventable diseases exacerbated by inadequate WASH infrastructure. Evidence Action’s Dispensers for Safe Water programme is well established throughout East Africa. The programme delivers chlorine to volunteer promoters who refill water dispensers and relay information to community members on the dangers of contaminated water and how to treat dispenser water with chlorine. NEEP funds allowed Evidence Action to bolster this existing programme in Kenya by offering training on evidence-based nutrition practices to dispenser promoters, who in turn provide advice on breastfeeding, hygienic food preparation and storage, meal frequency and energy density directly to households. Evidence Action is evaluating the programme’s impact on child growth, household food consumption and parental knowledge of proper nutrition practices.

Community-based delivery platforms have been identified as a promising practice to improve effectiveness and scalability of nutrition interventions, and Evidence Action is not the only NEEP civil society organisation to test this approach. HKI is evaluating the impact of providing women’s groups with training on agricultural techniques, nutrition, hygiene and proper childcare practices on reducing malnutrition and diarrhoea prevalence amongst children in Bangladesh. By adding participatory, interactive and educational “courtyard sessions” to an agricultural skills-building intervention, HKI hopes to achieve significant improvement in child stunting, wasting and micronutrient status, whilst building the evidence base for both community education and agricultural approaches.

CONCLUSION

From sub-Saharan Africa to Southeast Asia, NEEP grantees are testing novel approaches to reducing childhood malnutrition and disease. Although the final evaluation results are still being analysed, NEEP has successfully begun to fill in the gaps in evidence related to WASH and child nutrition outcomes. PATH will continue to support these programmes, providing technical assistance throughout the evidence dissemination process to ensure maximum uptake and optimal health outcomes for women and children throughout the developing world.

REFERENCES

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August 2017