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Giving Chance to Indigenous Knowledge In Developing Sustainable Nutrition Improvement Interventions

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Abstract

A study was conducted in Nsanje district in Malawi to find out the potential of locally available resources in coming up with sustainable nutrition interventions. 60% of malnourished children had their nutrition states improved within twelve days of feeding on locally available foods.

Introduction

Malnutrition is one of the worst public health problems in Malawi. Results of recent research indicate that 45.9% of under-five children in the country are stunted, 3.3% are wasted, 19.4% are underweight, and almost 60% of child deaths are caused by malnutrition. There has been much effort put in the fight against malnutrition; the government alone reports to have spent about 1.5 billion United States Dollars in the fight against malnutrition from 1992 to date. As if undermining all the efforts involved, the country is said to have not recorded any significant improvement in the nutritional indicators for the past three decades.

There have been a number of nutrition interventions running in Malawi. Why they have not been able to eradicate malnutrition remains a million dollar question in most people's minds. In an effort to search for sustainable solutions to the problem, a study was conducted in Group Village Head Mgona and Tsekerere in Nsanje District in Malawi with an aim of finding out how much local knowledge and other resources from within affected populations would help in the fight against malnutrition.

Materials And Methods

Nutrition Baseline Assessment

The first step in the study involved determining the level of malnutrition in Mgona and Tsekerere. All under-five children in the community (197 in total) were weighed and had their nutritional status determined by weight-for-age. Weight-for-age is a measure of both acute and chronic malnutrition; children whose weight-for-age is more than two standard deviations below the median of the reference population are considered moderately or severely underweight while those whose weight-for-age is more than three standard deviations below the median are classified as severely underweight. Of the 197 under-five children who were assessed, 87% were found to be malnourished by weight-for-age. The results of the assessment were presented to the community; each individual child's weight or nutritional status was graphically portrayed on a community scoreboard to help the community understand the overall nutritional status of children in the community. To avoid embarrassing some families, the scoreboard only showed marks and symbols, not names of children.

Identification of Positive Behaviours

According to the baseline assessment, only 13% of under-five children in the community were well nourished. The study further established that households from which the well nourished children were coming shared the same resources and faced the same risks as the rest of the community. An inquiry was therefore made to find out special, or uncommon, practices and behaviours that enabled these families to find better ways of preventing malnutrition. The inquiry found out that contrary to the rest of the community most of these households introduced complementary foods to their children after six months of exclusive breastfeeding and were giving their children three main meals a day plus snacks. The most common complementary food for these households was whole maize meal porridge. Apart from these, these families were feeding their children with sorghum, and milk, which are locally available in the community but are less consumed by most people. The households with malnourished children were characterised by introducing complementary foods to children before six months; feeding children a maximum of two meals per day and feeding them with "nsima'-a maize flour based staple and vegetables.

Planning of community based nutrition education and child feeding sessions

After identification of the positive behaviours practiced by care givers of the few well nourished children, the malnourished children identified from the baseline assessment were divided into 9 groups of 10 each and 1 group of 12 with their caregivers inclusive. The caregivers and their children were assembled together in their groups for two hours every day for 12 days. During each gathering caregivers were preparing energy rich and calorie-dense foods, (which were learnt from households with well nourished children), and fed their children under the guidance of care givers of the well nourished children. The care givers also learnt about locally available nutritious foods, positive child caring practices and health care behaviours based on findings from the inquiry on the few households. Care givers were making a daily contribution of foods needed for the meals. After the twelve days, all the children had their nutritional state assessed. The objectives of the sessions were to quickly rehabilitate the malnourished children; to enable the families involved sustain the rehabilitation of the children and to improve adoption of appropriate child caring, feeding and health seeking practices learnt from the model households from within the same community.

A care giver feeding

Care givers preparing food for children.

Results And Discussion

After 12 days of feeding from the locally available nutritious foods, the children had their nutritional status assessed. Results from the assessment indicated that 60% of the children had gained a minimum of 400 grams from the time of admission i.e. after 12 days of feeding on various locally available nutritious foods. According to the Child Survival Collaborations and Resources Group (2003), children who achieve between 400 and 800 grams of weight gain are growing fast or faster than the "International Standard Median" and are considered a successful outcome. Follow up home visits made indicated that care givers continued feeding their children with the food learnt over the 12 days period and were practicing appropriate practices they got trained on.

A comparative analysis with supplementary feeding programme, a nutrition feeding programme that is running in the same district, indicated that this community based intervention is comparatively more effective in terms of both treatment and sustainability. The supplementary feeding programme involves providing food rations i.e. fortified corn soya blend mixed with vegetable oil, to moderately malnourished children; average length of stay before gaining target nutritional status in the programme was found to be at least four weeks. As already pointed out, the pilot intervention took only twelve days to come up with a cure rate of 60%. Food supplements involved in the supplementary feeding programme are not locally available and can not be afforded by an average Malawian in a rural setting hence no potential for sustainability. The piloted intervention, on the other hand, used the very same resources (food and knowledge) that are available in the community for treating malnutrition. This has an advantage of not

only providing the needed recovery but also sustainability as resources involved are within the reach of the community.

Conclusion

Some solutions to malnutrition already exist in the communities and just need to be discovered. There is local knowledge in the communities, which if tapped, has the potential to turn things around.

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References

Mahshid Ahrari, Robert F. Houser, Siham Yassin, Mona Mogheez, Y. Hussain, Patrick Crump, Gary L. Darmstadt, David Marsh and F. James Levinson. 2006. A Positive Deviance-based Antenatal Nutrition Project Improves Birth-weight in Upper Egypt, International Centre for Diarrhoea Disease Research, Bangladesh.

Nutrition Working Group, Child Survival Collaborations and Resources Group (CORE). 2003. Positive Deviance/Hearth: A Resource Guide or Sustainably Rehabilitating Malnourished Children, Washington DC.