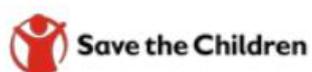


# ORIE Nutrition research capacity- building workstream

Research summaries

August 2017

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# 1 Introduction

The Operations Research and Impact Evaluation (ORIE) project, led by Oxford Policy Management, has contributed for the past five years to inform nutrition research and the policy debates in Nigeria and beyond.

ORIE provided operations research, impact evaluations, costing and cost effectiveness studies for the ambitious £52 million, six-year, Department for International Development (DFID)-funded Working to Improve Nutrition in Northern Nigeria (WINNN) programme, which supports the government to improve maternal, newborn and child nutrition in five northern states. ORIE worked closely with key federal and state government stakeholders to ensure that findings reached them and informed their policies.

ORIE also invests in strengthening the capacity of nutrition researchers working in Northern Nigeria, by providing funding to enable researchers to design and undertake their own research project with the ongoing support and guidance of a group of experienced international researchers.

Four research grants were provided (two in 2015, two in 2016) as a result of a competitive procurement process. The grants were accompanied by support activities, including ongoing informal support and guidance and formal training provided by ORIE's researchers and Nigerian experts. These support activities were designed to strengthen data collection and analysis and to provide a forum for trouble-shooting as and when problems arose. The formal program included training in qualitative and quantitative research methods and the use of specialised software packages for data analysis.

The document summarises the projects and findings of the four successful research projects.

## **2 SUMMARY OF ABU RESEARCH PROJECT SUPPORTED BY DFID/ORIE**

**Follow-up mortality, health and nutrition after discharge from Community Management of Severe Acute Malnutrition (CMAM) centres in Bakori LGA, Katsina state, northern Nigeria.**

**Prof MN Sambo, Prof SH Idris, Dr SS Bashir, Dr B P-Zakariyya and Dr HN Kera – Department of Community Medicine, Ahmadu Bello University, Zaria, Kaduna State, Nigeria**

The community-based management of severe acute malnutrition (CMAM) is a cost-effective outpatient intervention involving community mobilization for the detection of severely malnourished children and treatment with Ready to Use Therapeutic Food (RUTF) and antibiotics. While the effectiveness of CMAM on nutritional rehabilitation and mortality during the programme is well documented, little is known about the impact on child survival, growth and morbidity after discharge. The recorded addresses of 600 children who had been treated in CMAM centres in Bakori LGA, Katsina State were visited 7 months after discharge. 545 (90.8%) of the households were found. 23 children had died (a mortality rate of 4.2%); 10 (38.5%) died at home.

Stunting, underweight and wasting were present in 67.0%, 28.6% and 10.1% respectively. 73.1% of carers reported childhood illness after discharge but only 29.6% had visited a health facility. While this study shows encouraging rates of survival and nutritional status seven months after discharge from CMAM centres, it also demonstrated missed opportunities for interaction with health services for these children. Development and evaluation of follow-up CMAM services aimed at improving child survival, health and nutritional status are indicated.

### 3 SUMMARY OF BUK RESEARCH PROJECT SUPPORTED BY DFID/ORIE

#### **Comparative study of breastfeeding and complementary feeding practices among mothers/caregivers of stunted and non-stunted children in northwest Nigeria (The COMBAT HUNGER STUDY)**

**Z Iliyasu, A U Gajida, U M Lawan, S Abubakar, A M Jibo and M M Bello**

**Department of Community Medicine, Bayero University Kano & Aminu Kano Teaching Hospital, Kano, Nigeria**

Stunting rates are very high in northern Nigeria, contributing to impaired child development and lower intelligence, employment and salaries as an adult, as well as decreased resistance to infection and contributing to non-communicable diseases. While there are many factors, including maternal health and nutrition, which contribute to stunting, the potential for reducing stunting by improving infant and young children feeding (IYCF) is considerable. This study was established to examine the breastfeeding and young child feeding practices of mothers of moderately and severely stunted infants (6-9 months) and young children (18-24 months) and compare them with findings in non-stunted infants and children in the same environment. A convergent parallel mixed methods study was conducted among mothers of 788 stunted and 788 non-stunted 6-9 months infants and 18-24 months children in one LGA in each of four states, Jigawa, Katsina, Zamfara and Kebbi.

Nearly all mothers breastfed their children (99.4% vs. 98.9% among stunted and non-stunted infants (6-9 months) and among stunted and non-stunted children (18-24 months (98.4% vs 99.1%)). However, water was also given by mothers of stunted (52.6%) and non-stunted (66.5%) 6-9 month infants. Nearly three quarters (72.6% vs. 74.4%, respectively) of stunted and non-stunted 18-24 month children had water in the first month of life. Breastfeeding problems were reported more frequently in the first six months by mothers of stunted infants (15.5% vs 6.2%) ( $p < 0.001$ ). Advice on Problems with starting Breastfeeding was obtained from healthcare workers by more mothers with non-stunted infants than mothers with stunted infants (56.8% vs 40.6%). Mothers also sought advice from traditional healers, TBAs, herbalists and mother-in-laws. Patterns of feeding among children age 18-24 months were similar between stunted and non-stunted children.

Non-feeding predictors for stunting in infants included maternal paid work, father's education, source of health advice, duration of breastfeeding, history of serious diarrhoea, history of serious respiratory illness, source of water, and type of latrine ( $p < 0.05$ ). Non-feeding predictors of stunting among young children included fathers' occupation, household wealth, household food security, mother's previous infant death, and recent history of severe childhood diarrhoea ( $p < 0.05$ ). It is suggested that more effective IYCF promotion of exclusive breastfeeding and better care of women with breastfeeding problems needs development and evaluation, recognising the importance of interventions for other factors contributing to stunting.

## 4 SUMMARY OF JOS RESEARCH PROJECT SUPPORTED BY DFID/ORIE

**Follow-up mortality, health and nutrition after discharge from Community Management of Severe Acute Malnutrition (CMAM) centres in Jigawa State northern Nigeria.**

**Dr. Collins John, Dr. Ruth Adah, Dr. Diala Udochukwu, Dr. Luret Lar, Dr. Esther Awazzi Enzuladu, Dr. Idris Adedeji, Dr. Kazeem E Lasisi, Oluseyi Olosunde, Dr. Joel B Ajibuah, Dr. Femi James. University of Jos.**

The community-based management of severe acute malnutrition (CMAM) is a cost-effective outpatient intervention involving community mobilization for the detection of severely malnourished children and treatment with Ready to Use Therapeutic Food (RUTF) and antibiotics. While the effectiveness of CMAM on nutritional rehabilitation and mortality during the programme is well documented, little is known about the impact on child survival, growth and morbidity after discharge. The recorded addresses of 410 children who had been treated in CMAM centres in Jigawa State were visited 6 months after discharge. 383 (93.4%) households were found. 26/383 (a mortality of 6.8%) had died; 20 (77%) died at home.

At follow-up 330 (92.4%) had a MUAC of > 12.5 cms but only 160 (45%) children were fully immunised. While this study shows encouraging rates of survival and nutritional status at six months after discharge from CMAM centres, it also demonstrated missed opportunities for interaction with immunisation and health services for these children. The development and evaluation of follow-up CMAM services aimed at improving child survival, health and nutritional status even further are indicated.

## **5 SUMMARY OF MDG RESEARCH PROJECT SUPPORTED BY DFID/ORIE**

### **Contextual barriers to uptake of nutritional services and commodities in a selected Community in Yobe State, Nigeria**

**Dr Garba Mohammed Ashir,, Mrs Chinwe Ezeife, Dr chris Osa Isokpunwu, Dr H. Eme Ichoku, Dr Nathaniel Urama, Mr. Abdullahi Ali Danchuwa, Dr Bukar Lawan Maryah**

**University of Maiduguri Teaching Hospital; Department Community Health Services, National Primary Health Care Development Agency; Nutrition Division, Federal Ministry of Health; Department of Economics, University of Nigeria; Yobe State Ministry of Health**

A number of nutrition services are currently provided in Yobe State. These include promotion of good Infant and young child feeding (IYCF), micronutrient supplementation (vitamin A for children, iron/folate supplements for pregnant women, zinc supplements to accompany ORS), and community management of acute malnutrition (CMAM). However, rates of attendance and uptake of services are often low. A qualitative study of attitudes to nutrition services, including contextual barriers, was undertaken in three LGAs in Yobe State - Fika, Machina and Yunusari. The study focused on (a) IYCF messages (promotion of exclusive breastfeeding and adequate complementary feeding) given at health facilities during Maternal, Newborn and Child Health Weeks (MNCHW) and in the community and (b) provision of Vitamin A supplements to children 6-59 months, MUAC screening for malnutrition, and provision of iron and folic acid supplements to pregnant women during MNCHW. Interviews were conducted with community influencers and focus group discussions were conducted with satisfactory and non-satisfactory users (mothers, fathers and grandmothers) in three urban and nine rural communities. Reasons for low attendance and uptake of nutrition services included demand-side factors like lack of awareness of the services, low status of health and nutrition of women and children in the local culture, denial of permission to attend, dominance of decision-making by mother-in-law or a male in the family in health related matters, lack of transport or money for transport and security issues. Supply-side factors included nepotism and political interference in the recruitment and work of CV, lack of salary or incentives for the CVs, lack of knowledge of local culture among MNCHW staff who usually did not reside in the community because of inadequate accommodation, destruction of health facilities, and displacement of staff.

Respondents suggested a number of remedial actions including: (a) involvement of the community in the development of local health and nutrition committees, including community/traditional and religious leaders, to be advocates for filling of vacant posts and provision of supplies, popularising programmes, and technical support to the committees to increase participation and impact; (b) production of better publicity and learning resources, including print and the media; (c) improved collaboration between facility staff and community TBAs and CVs (ensuring that both groups understand and promote appropriate messages); (d) provision of incentives for community volunteers, clarifying messages on Infant feeding and diets for pregnant women, integration of TBAs into public health policy; (e) improving knowledge and capacity of MOH in planning for the resources needed for providing better services. It is suggested that specific novel activities to improve provision and uptake of services are implemented and evaluated.