ORIE Nutrition Research in Northern Nigeria

ORIE Nigeria Gender Synthesis Report

Gender-related findings across ORIE studies (Year Three)

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30 September 2015

Executive Summary

This second edition of the ORIE Gender Synthesis summarises gender-related findings from across ORIE studies completed during Year Three (May 2014 to April 2015). The Synthesis is updated annually with new evidence. It is aimed primarily at the WINNN Implementing Partners, Government of Nigeria stakeholders, and programme implementers. It aims to increase their awareness of how gender-related issues influence maternal and child nutrition and the uptake of women's and children's health and nutrition services, and to suggest the implications of the findings for WINNN programmes and government services. The Synthesis draws on information from the ORIE operations research studies (CMAM and IYCF), the impact evaluation midline qualitative institutional study, the ORIE Gender Briefing, and discussions with WINNN and federal Government of Nigeria representatives held in London on 24-25th March 2015.

Section 2 of the report presents ORIE findings on a set of gender-related questions which are set out in full in the main body of the report:

Gender question 1: evidence from the household survey suggests that women are of lower status than men. Low female status has been shown to constrain women's and children's health-related behaviour and underpin poor maternal and child nutrition.

Gender question 2: women's uptake of nutrition services is inhibited by their lack of autonomy in the home, including limitations on their freedom of movement, decision-making power and control over income.

Gender question 3: a shortage of female health workers of all categories in the Nigerian health services acts as a barrier to women's uptake of nutrition services; there has been little progress in putting policy frameworks for gender-sensitive nutrition services in place.

Gender question 4: there is very little opportunity for service users to influence the content of health service provision in Nigeria. More civil society representation in programme planning is needed, including of adolescent girls and women.

Section 3 of the report outlines the implications of these findings for WINNN programmes and advocacy. For programmes (MNCHW, CMAM, IYCF), the implications are:

1. Educate men using male-male communications that reinforce their responsibility for family welfare within Islam
2. Continue to improve service delivery as a means to reduce male resistance
3. Find ways to retain and motivate community volunteers, especially male volunteers, with gender-specific material and non-material incentives
4. Find ways to reach 'hard-to reach' women, including those in more remote rural communities, nomadic women, women in the poorest households, and the youngest adolescent mothers
5. Educate older women on the benefits of exclusive breastfeeding so that they support behaviour change among younger women in their households

For WINNN advocacy, the implications are:

1. Help governments to translate nutrition policy frameworks and plans into gender-sensitive nutrition services
2. Advocate for an increase in the number of female health workers
3. Advocate for increased voice and accountability, particularly for girls and women

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List of Abbreviations

ACC	Administrative Committee on Coordination
CDG	Child Development Grant
CMAM	Community-based Management of Acute Malnutrition
CV	Community volunteer
DFID	Department for International Development
EBF	Exclusive breastfeeding
FEC	Federal Executive Council
FOMWAN	Federation of Muslim Women's Associations in Nigeria
HW	Health worker
IE	Impact evaluation
IFPRI	International Food Policy Research Institute
IYCF	Infant and Young Child Feeding
LCFN	Local Committee on Food and Nutrition
LGA	Local Government Area
MNCH	Maternal, Newborn and Child Health
MNCHW	Maternal, Newborn and Child Health Weeks
NAFDAC	National Agency for Food and Drugs Administration and Control
NDHS	Nigeria Demographic and Health Survey
NEC	National Economic Council
NFNP	National Food and Nutrition Policy
NPC	National Planning Commission
NSPAN	National Strategic Plan of Action for Nutrition
OPM	Oxford Policy Management
OR	Operations research
ORIE	Operations research and impact evaluation
PATHS	Partnership for Transforming Health Systems
PHC	Public health care
RUTF	Ready-to-use therapeutic food
SAM	Severe acute malnutrition
SCFN	State Committee on Food and Nutrition
SCN	Sub-Committee on Nutrition
CSO	Civil society organisation
VHC	Village Health Committee
W4H	Women for Health
WINNN	Working to Improve Nutrition in Northern Nigeria

1 Introduction and approach

This second edition of the ORIE Gender Synthesis summarises gender-related findings from across ORIE studies produced between May 2014 and April 2015 (Year Three). The report is aimed primarily at the WINNN Implementing Partners, Government of Nigeria stakeholders, and programme implementers. It aims to increase their awareness of how gender-related issues influence maternal and child nutrition and the uptake of women's and children's health and nutrition services, and to suggest the implications of the findings for WINNN programmes and government services. The report is updated annually to incorporate gender-related findings that have emerged in studies conducted each year. This year the report contains an infographic which highlights the pathways between gender inequality and poor nutrition in Northern Nigeria (Annex A).

The Synthesis draws on information from three sources. The first is the data produced by ORIE[1] during Year Three:

- The ORIE operations research (OR) CMAM study (October 2014)
- The ORIE operations research (OR) IYCF study (March 2015)
- The ORIE impact evaluation midline qualitative institutional study (April 2015)[2].

A brief overview of the content and methodology of each study is provided in Annex B. We do not go into great detail on the study findings in this synthesis; for more detail, the reader needs to refer to the full studies. We repeat some of the data from last year's studies where it serves to reinforce a particular point. All three studies use qualitative data drawn from small, purposively-selected samples, and as such are indicative rather than representative of issues and perceptions in the sampled Local Government Areas (LGAs). This means the findings do not necessarily apply across all WINNN LGAs and states.

The second source of information is the ORIE Gender Briefing: Gender Inequality and Maternal and Child Nutrition in Northern Nigeria. The Briefing draws on a review of evidence in online peer-reviewed journals and 'grey' literature to demonstrate the pathways by which gender inequality is linked with poor maternal and child nutrition in Northern Nigeria. It then establishes a set of five gender-related research questions to explore issues which underpin maternal and child nutritional outcomes and demand- and supply-side barriers to the uptake of nutrition services. We have since dropped research question two, which asked whether differences in care and feeding practices, diets and health-seeking practices between boys and girls could explain the differences in child nutritional outcomes by sex observed in national data (NDHS, 2008) and the ORIE baseline household survey. We decided to drop the question for two reasons. First, the magnitude of the differences is not great. Second, there were no obvious explanations for the differences in the ORIE survey data. The most likely explanation for the differences is a combination of biological differences in nutritional needs (higher energy and micro-nutrient needs for growth among boys) and activity levels (higher activity levels and energy expenditure among boys).

Lastly, the report is informed by discussions among ORIE researchers, WINNN representatives and Nigerian federal government stakeholders at the review and evidence-sharing meetings held in London on 24-25th March 2015.

[1] ORIE research is carried out in four of the five WINNN states: Jigawa, Katsina, Kebbi and Zamfara, Yobe is excluded for security reasons. These four states are referred to in the report as 'the study states'
[2] ORIE has also produced analysis of WINNN's Year Two and Three costs but there are no gender-related findings in these studies

2 Gender-related findings in ORIE research

2.1 Introduction

This section summarises the gender-related findings from each of the ORIE studies against the set of research questions developed in the Gender Briefing.

2.2 Gender Question 1: The impact of gender inequality on health-related behaviour and maternal and child nutrition

What is the relationship between gender inequality, health-related behaviour, and maternal and child nutritional outcomes for different women in this context?

Table 1: Selected household survey indicators

	Household head (99% male, 1% female)	Mothers
Average age at first marriage (years)	-	15
Average age at first birth (years)	-	17
No formal education	67%	87%
Economically inactive	1%	31%
Of economically active: own business	32%	93%
Requires husband/household head's permission to go to nearest health facility alone	-	97%
Participation in local group/association	33%	4%
	Husband alone	Mother alone
Decisions on food purchases	46%	4%
Decisions on child healthcare	34%	3%
Decisions on major household purchases	29%	17%

Source: Visram et al, 2014

No new data have been collected in relation to this research question over the last twelve months. The table above shows data from the baseline household survey conducted in 2013 in the four study states; the salient points are summarised here in order to contextualise findings from the last 12 months.

Mothers in the survey sample are married and bear children at an early age (15 years at first marriage and 17 years at first pregnancy, on average). A higher proportion of mothers than household heads (99% of whom are male) have no formal education (87% vs 67%), and are economically inactive (31% vs 1%). The large majority of mothers require their husband's permission to leave the home, and mothers have less decision-making power than their husbands on domestic matters. Girls and women who marry and bear children at a young age, have little formal education, have limited control over income and household decisions, and whose freedom of movement is constrained, may be less able than other women to access health and nutrition services, and to follow recommended child feeding practices. These factors conspire to produce poor female, maternal and child nutritional outcomes. Further, undernutrition is frequently transmitted across generations, from mother to child (ACC/SCN-IFPRI, 2000). Data from the

household survey indicate that a number of children in the sample were born stunted, suggesting chronic nutrient deprivation among pregnant women.

2.3 Gender Question 2: Gender-related demand-side barriers to the uptake of nutrition services

What are the gender-related demand-side barriers to uptake of nutrition services, including men's knowledge, attitudes and behaviour, how do these vary for different women, and how may they be modified to improve maternal and child nutrition outcomes?

Domestic gender roles and relations and men's knowledge, attitudes and behaviour can impinge heavily on women and children's uptake of nutrition services. Evidence from all four states in all three of the studies undertaken in the last 12 months reinforces the statements made in the 2014 Gender Synthesis about the importance of male consent and support for women to access each of the nutrition services supported by WINNN. In the household survey, 97% of mothers reported needing the permission of their husband or the male household head to go alone to the nearest health facility. The qualitative evaluation authors note that in Jigawa "..numerous community stakeholders reflected on the importance of reaching men and indeed that "*it is men that resist*" (FOMWAN Jigawa)….", while in Zamfara "..many Imams and community leaders explained that they focus specifically on advocacy towards men – since "*the men are the bottlenecks to women's participation*"….". In Kebbi, male community volunteers (CVs) observed that "…*resistance about going to the facility is mostly from men*". Similarly, respondents across all interviewee strata in the OR IYCF study reported that "..lack of permission from the husband could be a major barrier for programme attendance" and that "…women need to get permission from their husbands to practice exclusive breastfeeding..". Both studies recognise that many elderly women, the "custodians of existing practices", are as resistant as men to the introduction of exclusive breastfeeding (EBF). The strength of evidence in each of the studies suggests that while there are many barriers to the uptake of nutrition services and to behaviour change, resistance among men and older women is an important one.

Women are often seen as responsible for child health and nutrition, yet limitations on their decision-making power and control over resources within the household pose a challenge to their ability to care for their children. In the household survey, 34% of mothers indicated that their husbands make decisions on child healthcare alone, and 46% indicated that their husbands make decisions on food purchases alone. Sixty-nine percent of mothers in the sample were economically active, with 93% of those owning their own business, and most of the mothers earning income retained sole or joint control over their income. But the income from a small business – which, for women in Northern Nigeria, usually involves minor trading of snack foods - is likely to be very low. Lack of cash for transportation is cited as a major barrier for women in more remote communities to access services, especially CMAM services which involve repeat visits. Health workers (HWs) and CVs in Jigawa observed that default from the CMAM programme is frequently because "…*women don't have the resources to act independently*" and are unable to make autonomous decisions about healthcare. WINNN staff in Zamfara explained that low uptake of referrals to CMAM stabilisations centres is often due to distance and cost. Difficulty paying for transportation may be due to household poverty, or because men are unwilling to make provision out of the income under their control. Mothers may also have difficulty getting suitable foods for complementary feeding if husbands are reluctant to buy more expensive items. One respondent in the OR study declared "..*women….stay at home with no jobs and no handworks, they...rely on what their husbands give them…*". Mothers' household and childcare responsibilities were also identified as a barrier to uptake of CMAM services, and particularly referrals to stabilisation centres, as attendance at stabilisations centres requires an overnight stay.

The OR CMAM study provides insight into the reasons underlying lack of male consent and/or financial support. Reasons cited by husbands for not allowing wives to access services were: mistrust of the programme, especially in rural areas (although many husbands reporting valuing the programmes), ignorance or misunderstanding of the programme (eg believing a child with SAM has recovered before completing treatment), bad experiences on prior visits (eg stock-outs, restricted hours, lack of shelter at facilities), financial constraints, and concerns about safety and security due to factors such as distance to the facility, poor roads or seasonal flooding.

2.4 Gender Question 3: Supply-side barriers to the provision of gender-sensitive nutrition services

What are the supply-side barriers to the provision of gender-sensitive and responsive nutrition services, how do these vary for different women, and how may they be modified to improve maternal and child nutrition outcomes?

The OR and the qualitative midline study both repeat a finding from last year's studies, that there continues to be a shortage of female HWs in the Nigerian health system, especially in rural areas and in the provision of primary health care. In one of the study LGAs in Katsina state, skilled female HWs make up less than 25% of the workforce. Reasons for the shortage identified in the baseline evaluation study were the low level of female education and cultural constraints on women's employment. The shortage acts as a barrier to women's uptake of services in the North, as women and men both may be resistant to female healthcare provision by a male HW. Female CVs in Kebbi observed that there are men who "….*prevent the woman from coming in contact with other men*", and some husbands interviewed in the OR MNCHW study (May 2014) declared that they didn't want their wives to be seen by other men.

More broadly, there has been little progress on putting in place a policy framework for gender-sensitive services. The National Strategic Plan of Action for Nutrition (NSPAN) 2014-2018 prioritises the nutrition of women of reproductive age, recognising that the low social status of women is an important 'cause' of malnutrition and that actions to empower women in society and within households would help to improve maternal and child nutrition. The draft National Food and Nutrition Policy (NFNP) proposes gender-sensitive interventions such as opportunities for women in smallholder farming which could help to increase their incomes as well as food production, in combination with labour-saving domestic technologies which could help to reduce women's domestic workloads. Both documents are theoretically-sound from a gender perspective – but there is a need to translate their policy recommendations into action. State governments are awaiting passage of the NFNP before creating their own policy frameworks, but all have put costed workplans in place. As the plans are not, as yet, accompanied with a narrative or strategic objectives it is impossible to tell if they take gender considerations into account.

2.5 Gender Question 4: How to enhance women's voice for better nutrition services

What approaches are effective at enhancing girls' and women's voice and engagement in formulating policies, plans, and resource allocation in nutrition services?

The qualitative impact evaluation baseline study stated that "…there is very little opportunity at any level of the system for service users to influence the content or approaches to health service provision", and that "…systems to enable accountability of providers to service users have not been established". The midline study reports little change in this respect. The State Committees on Food and Nutrition (SCFN) are the most appropriate vehicle by which to engage service users in

nutrition service planning, and although they are now fully or partially functional in all four states, only the Zamfara Committee includes representation of some civil society organisations (CSOs).

Civil society representation must include not only men, as is often the norm, but also adolescent girls and women. Some of the mothers interviewed for the OR MNCHW study suggested that attendance would increase if women were included in programme planning. Female political representation and participation are low throughout Nigeria and especially in the North. In the ORIE survey sample, only 4% of mothers participated in a local group or association. There is no information on female representation on the SCFNs in the midline evaluation report, but without CSO participation it is likely to be low or non-existent. The only reference to female representation in the report is in the Local Committees on Food and Nutrition (LCFN) in Zamfara. In Jigawa some Village Health Committees (VHCs) have started to monitor CMAM service delivery, but the PATHS2 Annual Review noted that female participation on VHCs is limited.

3 Implications for WINNN programmes and advocacy

3.1 Introduction

In this section we discuss some of the possible implications of the evidence presented in the last section for WINNN programmes and advocacy. The implications for programmes apply across all three nutrition interventions – MNCHW, CMAM and IYCF. We have limited the discussion to the nutrition-specific interventions which WINNN aims to strengthen alongside government agencies. If DFID wishes to extend WINNN to include nutrition-sensitive interventions in a next phase, it may consider some of the broader interventions which could help to overcome gender-related barriers to good maternal and child health and nutrition, such as the need to delay first pregnancy, to improve girls' schooling, and to integrate content on health, nutrition and child development into primary and madrassa school curricula..

3.2 WINNN programmes: MNCHW, CMAM, IYCF

1. Educate men using male-male communications

Many men control more income and have greater decision-making power in the household than their wives, and many are resistant to the utilisation of health and nutrition services by their wives and children. They need to understand the importance of maternal nutrition and infant and young child feeding, and the benefits of health and nutrition services, particularly for the physical and cognitive development and future life prospects of their children (performance at school, productivity and earnings as adults). Armed with such knowledge they are more likely to encourage and support their wives' use of services, and to make decisions and allocate income under their control for the welfare of household members.

Male resistance is best addressed by targeted male-male communications that reinforce their responsibility for family welfare within Islam. WINNN's strategies over the last year to engage male community and religious leaders and volunteers in gendered approaches to communications were widely recognised by evaluation study respondents as an important factor in the increased uptake of CMAM, MNCHW and IYCF services since the baseline study. Community and religious leaders have been integrated into programme implementation from the outset (eg selecting programme sites and CVs) in order to increase their sense of ownership. They have been instrumental in cascading messages to men in community settings and at mosques, ensuring that they understand the importance of the nutrition interventions and encourage their wives to attend, and to adopt the behavioural changes for EBF and good complementary feeding. Differentiated roles for male and female CVs have also helped to reduce male resistance. The role of male CVs is to talk with fathers to ensure they understand the benefits of the nutrition programmes and will support their wives; when fathers continue to resist, CVs are trained to involve trained HWs and the community or religious leader. WINNN should continue to harness these successful strategies.

2. Continue to improve service delivery as a means to reduce male resistance

Some men refuse permission for their wives to attend nutrition services due to poor service on prior visits or experienced by their peers. Service issues mentioned by men in the OR CMAM study included stock-outs of essential drugs on the day of their visit, restricted hours such that service users were not attended after long travel and waiting times, or long hours waiting in the hot sun or rain where no shelter was available. It is important that such service delivery issues are ironed out as WINNN continues to work with programme implementers to strengthen health systems and integrate nutrition services into regular primary healthcare.

3. Find ways to retain and motivate CVs, especially male CVs

Although attrition rates among CVs were higher at baseline than in the midline evaluation study, reduced engagement of CVs was observed in Kebbi state, and attrition is still high in Katsina state, especially among men. Male volunteers particularly feel the loss of foregone income during time spent in voluntary activities, given their role as providers for their families. Male CVs are now in short supply in some communities in Katsina, posing a risk to the important role they play in convincing men to allow their wives to access nutrition services. The difficulties associated with retaining CVs long-term without financial reward have long been recognised internationally. They have been exacerbated in Northern Nigeria by payment of CVs engaged with other health programs. The OR IYCF study recommends testing a mix of material and non-material incentives for CVs in order to maintain motivation and increase long-term commitment. These should likely be gender-specific, as male and female CVs will respond to different incentives. For male CVs, indirect mechanisms that help them with livelihoods and reduce foregone income are likely to help. WINNN should consider gender-specific incentives in its study of CV motivation.

4. Find ways to reach 'hard-to-reach' women

The midline qualitative evaluation indicates that in all states nutrition services are not getting to some groups of 'hard-to-reach' women. It also makes it clear that sound IYCF practices, particularly EBF, are so far being embraced mainly by 'early adopters'. 'Hard-to-reach' women include those in more remote rural communities, nomadic women, women in the poorest households, and adolescent mothers. Analysis of ORIE's baseline household survey data could help WINNN to identify the 'hard-to-reach' groups of women who are not accessing nutrition services or using recommended IYCF practices.

A number of strategies could help to reach these women. First, services could be further decentralised to a larger number of facilities or posts that reach women in more distant communities. WINNN's strategy to improve MNCHW coverage by introducing more fixed posts and mobile teams has already demonstrated results. There is an urgent need to find a similar strategy for CMAM services. Second, IYCF CVs need assistance in order to take their IYCF messages further afield. This could be done by providing them with transportation (motorbikes for example), or financial assistance with transportation costs. Third, mass media channels such as radio and TV can be used to extend the reach of IYCF messages. WINNN is already promoting radio jingles, but could assess the usefulness of harnessing more mass media vehicles. Fourth, WINNN could explore passing on nutrition information and messages to hard-to-reach women through other groups in contact with them, for example animal health vaccination teams in contact with pastoralists. This might also be done via community and religious leaders in more remote communities.

5. Educate older women on the benefits of exclusive breastfeeding

Many elderly women have so far proved resistant to the practice of EBF, believing that the way they fed their young children – particularly giving them water in addition to breastmilk – was effective. As elderly women tend, in their roles as mothers, mothers-in-law, and grandmothers, to have authority over younger mothers in their homes, it is important to persuade them of the benefits of EBF. Female-female communication and female role modelling may be the most effective strategies; elder women could be engaged with an active role in the planned EBF award ceremonies. One important channel to communicate information may be through existing women's groups and networks, such as those cited in WINNN's 2012 Rapid Socio-Cultural Assessments in Jigawa (Manoukian, 2012) and Zamfara (Constantine, 2012).

3.3 WINNN advocacy

1. Help governments to translate policy frameworks into gender-sensitive nutrition services

There is some movement towards formalising nutrition policy and plans at national and state levels: the draft NFNP awaits approval of the National Economic Council (NEC) and the Federal Executive Council (FEC) and is likely to be passed in 2015; state governments will be expected to domesticate the NFNP once passed; and state governments have formulated costed workplans, albeit without accompanying narratives that would help to assess their gender sensitivity. Both the NFNP and the NSPAN contain gender-sensitive recommendations. This is an opportune moment to work with state governments to ensure they translate these policy recommendations into concrete actions to provide gender-sensitive nutrition services. The Ministry of Women's Affairs (MWA) may be an important ally at national and state level. Although the Ministry is represented on the Zamfara SCFN, its engagement with nutrition work is generally perceived to be weak and insufficient. WINNN could strengthen its relationship with the MWA, recognised by WINNN staff interviewed for the midline evaluation as weak, just as it has successfully forged strong ties with other MDAs such as the National Planning Commission (NPC), the Ministry of Agriculture, and the National Agency for Food and Drugs Administration and Control (NAFDAC).

2. Advocate for an increase in the number of female health workers

Particular attention should be paid to the number of female HWs employed in primary healthcare services and in rural communities. There may be opportunities to collaborate with the DFID-funded Women for Health (W4H) programme which works to increase the quantity and quality of female health workers in rural areas in four of the five WINNN states of Northern Nigeria and to create a 'gender-friendly environment' for women to pursue health-related careers[3]. The PRINNN-MNCH programme is also working to improve health sector human resources in some of the WINNN states. It may also be important to ensure that female health workers are of an accepted ethnic group.

3. Advocate for increased voice and accountability, particularly for girls and women

More work is needed to create opportunities for service users to contribute to nutrition service planning, and systems that ensure accountability of providers to service users within the Nigeria health system. The Committees on Food and Nutrition at national, state and local level provide the most appropriate vehicle for engaging service users, and especially women, in nutrition policy and service planning. Civil society representation, including CSOs that represent women and adolescent girls, is needed, but at this point in time is present only on the state and local committees in Zamfara. The VHCs are another important vehicle, and have started playing an active role in monitoring services in Jigawa. WINNN could work alongside efforts of PATHS2 to increase the currently low female representation on VHCs. FOMWAN may be a useful ally in helping to develop women's representation at the community level, as may the recently-formed Gender and Social Inclusion coalition in Jigawa.

[3] See http://devtracker.dfid.gov.uk/projects/GB-1-202694/

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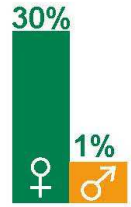
Annex A Infographic

Greater autonomy for women will improve child health and nutrition in Northern Nigeria

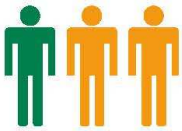
15 years
Average age girls get married

17 years
Average girls' age at first pregnancy



More mothers than fathers have no source of income

Almost all mothers require their husband's permission to go to the health facility alone


1 in 3 husbands make child health care decisions alone

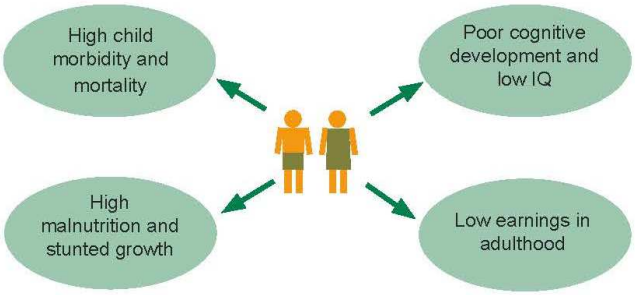
Mothers with limited decision-making power and control over resources are less likely to access health and nutrition services

12% babies delivered with assistance of a health professional

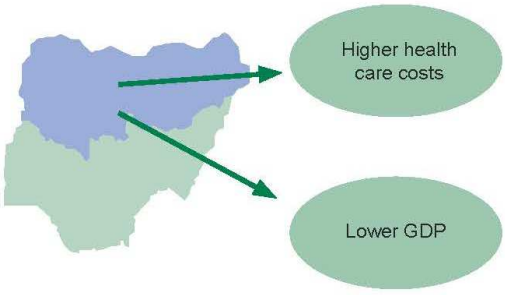
14% of mothers received postnatal care

5% mothers attended last Maternal Neonatal and Child Health Weeks (MNCHW)

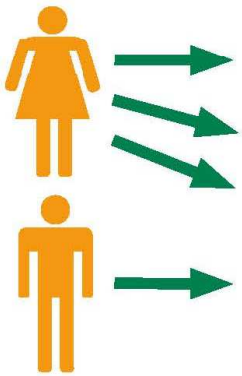
What is the impact on children?



.....and on the nation?



What can we do about it?



Increase women's autonomy: **access to schooling, reproductive health services, income-earning** opportunities

Delay first pregnancy

Involve women in nutrition policy and planning

Target messages at men: use of health and **nutrition services** translates into **better life chances** for their **children**

Survey data collected by ORIE in Jigawa, Katsina, Kebbi and Zamfara states in 2012 on mothers with children 0-3 years

www.heart-resources.org/orie/

ORIE Nutrition Research in Northern Nigeria

Annex B Information on ORIE studies

B.1 ORIE impact evaluation baseline household survey

The quantitative impact evaluation uses quasi-experimental techniques to assess changes in treatment and control groups from baseline to follow-up three years later on WINNN outputs focused at the LGA level (CMAM and IYCF). The household survey covers a sample of 6,833 households in the four study states, split evenly across the treatment and control groups. The report provides data on the characteristics of survey communities, households, household heads, mothers aged 15-49 years with children 0-35 months old, and children 0-35 months old. It includes information on mother's knowledge of IYCF practices, actual IYCF practices for children in the sample, and data on respondents' experiences with three nutrition interventions, MNCHW, CMAM and IYCF. The data were collected in June 2013.

B.2 ORIE impact evaluation midline institutional study

The qualitative institutional evaluation uses a theory-based approach to assess WINNN's contribution to changes in the governance contexts for nutrition interventions. It collects qualitative data at federal level and in two purposively selected LGAs in each of the four study states using a combination of key informant interviews, focus group discussions, participatory methods and policy and document review. Respondents are drawn from four stakeholder groups: government officials responsible for nutrition interventions and PHC (federal, state and LGA levels); service providers implementing nutrition initiatives; CVs implementing nutrition initiatives; and civil society stakeholders at the federal, state and LGA level with an interest in nutrition interventions and outcomes. The report provides nuanced first-person accounts of different stakeholder perspectives and experiences of nutrition interventions, without claiming that these accounts are 'representative'. The data were collected in October-December 2014.

B.3 ORIE operations research CMAM study

The operations research CMAM study examined four questions identified with WINNN: what are the opinions and perceived benefits of the CMAM programme among beneficiaries and programme functionaries; what are the challenges to accessing CMAM services and why are default rates high; how can HW and CV motivation and commitment be maintained; and how can CMAM be integrated into the PHC system. The research was conducted in 2 LGAs in each of two states, Jigawa and Zamfara, using FGDs with mothers of CMAM beneficiaries who had and had not defaulted from the CMAM programme, and male and female CVs, and IDIs with state and LGA level officials, CMAM HWs, and fathers of CMAM beneficiaries (defaulters and non-defaulters). As findings are based on small sample sizes and sampling was purposive, the findings are indicative rather than representative. The data were collected in March 2014.

B.4 ORIE operations research IYCF study

The operations research IYCF study examined five questions identified with WINNN: what are the opinions of beneficiaries and government officials about the IYCF programme; what are the barriers, motivators and facilitating factors for the adoption of improved infant feeding practices; how can the programme be strengthened to better meet the needs of beneficiaries and motivate behaviour change; how can HW and CV motivation and commitment be maintained; and how can the programme be integrated into routine health services. The research was conducted in 2 LGAs in each of two states, Kebbi and Katsina, using FGDs with mothers (pregnant or with a child 0-23 months) who had and had not participated in a community-based IYCF group session,

grandmothers, male beneficiaries and male and female CVs, and IDIs with health sector officials and IYCF HWs. As findings are based on small sample sizes and sampling was purposive, the findings are indicative rather than representative. The data were collected in September 2014.