ORIE Nutrition Research in Northern Nigeria

How to strengthen the Infant and Young Child Feeding (IYCF) programme in Northern Nigeria

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Preface / Acknowledgements

This report presents findings from the operations research (OR) study which was conducted to strengthen the Infant and Young Child Feeding programme, in northern Nigeria .The work was a collaborative project between the London School of Hygiene & Tropical Medicine, Food Basket Foundation International and Oxford Policy Management. The OR research team included the following members in alphabetical order:

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The study design and its interpretation were made possible through the interest and dedication of the Working to Improve Nutrition in Northern Nigeria (WINNN) team, especially from Dr Ibrahim Oloriegbe the chief of party; Dr Stanley Chitekwe, Dr Davis Omotola and Pragya Mathema from UNICEF and Karina Lopez and Oluwatoyin Oyekenu from Save the Children International and Maureen Gallagher from Action Against Hunger.

The authors would like to acknowledge the dedication and hard work of the field team, which included the focus group facilitators – Magaji Idris, Sani Ibrahim, Rashida Abdullahi and Hafsat Lawal; and focus group note takes – Mohammed Sani Yau, Yusuf Shuaibu, Pamela Eje, Hadiza Mohammed and Habiba Muazu.

The authors would like to acknowledge the valuable contribution towards overall project management / planning from the Oxford Policy Management staff; namely Dr. Emma Jones, Dr. Vincent Ahonsi, and Ijeoma Iroaganachi.

Finally, the authors would also like to acknowledge the ideas, insights and inspiration we have all received from the late Professor Isaac Akinyele during this project. We dedicate this work to him and his vision of strengthening nutrition programmes to benefit mothers and young children in Nigeria.

This assessment is being carried out by ORIE. The project director is Patrick Ward [P.Ward@opml.co.uk]. For further information contact Elaine Ferguson [Elaine.ferguson@lshtm.ac.uk]

Executive Summary

Introduction

The prevention of under-nutrition via the Infant and Young Child Feeding (IYCF) programme is one of four outputs of the DFID-funded programme "Working to Improve Nutrition in Northern Nigeria" (WINNN). This output aims to prevent under-nutrition by promoting evidence-based IYCF feeding recommendations, including exclusive breastfeeding until an infant is 6 months of age, feeding a diverse diet of nutritious foods and breastmilk from 6-23 months of age, feeding a sick child and good hand-washing practices. WINNN is implemented by UNICEF, Action Against Hunger (ACF) and Save the Children International (SCI), in partnership with five state governments. SCI is responsible for its implementation in Zamfara, Kebbi and Katsina states, and ACF is responsible for its implementation in Jigawa and Yobe states. Each of the five WINNN states implements the IYCF programme in three Local Government Areas (LGAs).

The IYCF programme includes:

> (1) Facility-based IYCF counselling for pregnant women and mothers with an infant less than 2 years of age, facilitated by health workers (HWs);
>
> (2) Community-based IYCF counselling for pregnant women and mothers with an infant less than 2 years of age, facilitated by community volunteers (CVs);
>
> (3) Community-based meetings with fathers of infants less than 2 years of age and grandmothers, facilitated by CVs.

The key operational research questions identified by WINNN, for the IYCF programme, were how to strengthen its implementation and motivate behaviour change to improve infant and young child feeding practices. In addition, WINNN requested the OR study to help strengthen their understanding of the LGA and state level factors that might impact on the long-term sustainability of the IYCF programme and its integration into the primary health care system. The specific objectives of this series of operations research were:

1. To determine the opinions of health sector officials and IYCF programme beneficiaries about the implementation, benefits and challenges of the IYCF programme
2. To understand how the IYCF programme is implemented, managed and integrated into routine health services
3. To understand the experiences, motivation and long term commitment of IYCF programme health workers and community volunteers
4. To determine how to strengthen IYCF programme implementation to facilitate its integration into routine health services and meet the needs of IYCF programme functionaries and beneficiaries
5. To determine the barriers, motivators and facilitating factors for the adoption of the improved infant feeding practices being promoted in the IYCF programme
6. To determine how to support IYCF beneficiaries and motivate behaviour change towards improved infant feeding practices

Research Approach

The IYCF operations research was conducted in two LGAs in two of the five WINNN focal states in northern Nigeria: Katsina and Kebbi, in September 2014. Data were collected through focus group

discussions (n=44 FGDs) and in-depth interviews (n=27 IDIs). The focus group discussions (FGD) were facilitated with:

(a) Women who had and had not participated in the community-based IYCF counselling sessions,
(b) Grandmothers, traditional birth attendants and husbands of women who were eligible for the IYCF programme.
(c) IYCF programme community volunteers (male and female).

In-depth interviews (IDIs) were facilitated with:

(a) State level officials, including the Directors of Primary Health Care, Nutrition Officers, Health Education Officers and Reproductive Health officers
(b) Health workers participating in the IYCF programme
(c) State level IYCF Advisors for WINNN

The community level FGDs were stratified into urban and rural communities.

The results presented are based upon the perceptions and experiences as reported by those interviewed and the interpretation of these by the research team, who coded, analysed and interpreted the data.

Key Findings

General

Finding a name in the Hausa language to distinguish the IYCF programme from other programmes was challenging. These labelling issues may have resulted in some misinterpretations of the questions by respondents during the interviews or by the study team during the analysis. They raise the question of whether or not the process of IYCF message delivery could benefit from distinctive labelling in the Hausa language, to distinguish it as a preventative rather a treatment of malnutrition programme. Distinct labelling may also help to raise the profile of the IYCF messages at all levels from the community to the government, which is important for long-term sustainability; as long as it did not detract from the sense of community ownership of IYCF message delivery.

The IYCF programme was viewed positively by those interviewed based upon the perceived visibility of the health benefits, and consequent health care resource savings. Exclusively breastfed babies were observed from the personal experience of respondents as generally healthier with less episodes of diarrhoea than their counterparts/siblings who were not exclusively breastfed. These perceived health benefits were the main focus of the positive opinions of the IYCF programme among study respondents; and was the main reason fathers and state level officials expressed a desire for its continuation and expansion into other communities.

IYCF Programme Implementation

At the community level, the IYCF programme is designed to be delivered by CVs through support groups or individual level counselling; where peer to peer group interaction is facilitated through support group counselling. There were mixed opinions among those interviewed about preferences for the CV facilitated support group or individual counselling sessions. Support group counselling was the preference of grandmothers, CVs and some mothers interviewed because it increased confidence, reinforced attitudes, understanding and spread of the messages through peer-to-peer interactions; whereas individual counselling was the preference of other mothers and health

workers interviewed because it addressed individual concerns. These perceptions concur with practices that have effectively been used in other countries; where group counselling is used to address common IYCF issues, and individual counselling is used to address rare concerns. They suggest a combination of group and individual counselling might work well in Northern Nigeria.

The CV-facilitated support groups, which are a core component of the community-based IYCF programme, however, were not clearly described by study respondents. Even though our data suggest CVs are performing IYCF sensitisation in the communities, which includes community meetings, going from house to house, attending ceremonies, and informing people about upcoming IYCF meetings, their descriptions were not consistent and it was unclear as to whether the same women were meeting regularly. It is possible that many references to “community meetings” were in fact “support group” meetings but they were rarely referred to as such by either CVs or beneficiaries and the numbers of women attending these meetings could be well above the numbers planned. Strengthening the structure of such meetings by holding regular meetings with the same women would align more closely with the support group structure as planned.

There was broad consensus among health sector officials interviewed that the IYCF programme was well integrated into existing health services, in particular with Antenatal Care (ANC) and immunisation services. Integration was mainly perceived as IYCF health messages being delivered and/or reinforced during other health services, and key messages about other health programmes being delivered through IYCF. There was a perception from some health sector officials that IYCF had improved the quality of the health messages being delivered in ANC. There also appeared to be an active complementary referral system occurring between the hospital and community components of the IYCF programme.

One important finding from this study, which is based on the perceptions of some health sector officials, is that the IYCF community-based programme has resulted in higher attendance at ANC and childhood immunisations; coverage of which are extremely low in Northern Nigeria. In terms of the IYCF programme reaching as high a proportion of pregnant women, mothers and young children as possible, the community component is clearly very important as access to routine preventative programmes in health facilities is low. Furthermore, if IYCF truly does have the potential to increase coverage of ANC and/or childhood immunisations, in Northern Nigerian states, then it is of major importance to the public health of the population.

Concerns were raised by fathers and health sector officials about the limited financial allowances given to the IYCF CVs, which was perceived as a threat to the long-term sustainability of the community-based IYCF programme. The constraints of time, the need for a transport allowance and money for remuneration identified by the CVs are not unique to the Nigerian IYCF programme. Further research is needed to evaluate appropriate mixes of material or non-material incentives, for CVs, to strengthen their motivation and commitment to the WINNN supported IYCF programme, as high CV attrition is disruptive and costly.

Recommendations from CVs, for strengthening the implementation of the IYCF programme, included strengthening the refresher training and supportive supervision components of the programme. Successful scale-up of IYCF programmes elsewhere has been partially attributed to strong refresher training and supportive supervision systems. Supportive supervision, in particular, was perceived by CVs as important for strengthening their motivation, confidence and skills, in delivering the programme; and for increasing the perceived importance of the programme and the community’s confidence in it. Political commitment, partnerships, IYCF champions and advocacy, are also key components for successful scale-up, as reported elsewhere and in the ORIE qualitative evaluation report.

The Behaviour Change Strategy and Messages

Informational, material and small media behaviour change strategies are being used in the IYCF programme, as evidenced by beneficiary knowledge of the recommended IYCF practices, and positive comments about counselling cards (materials) and pictures of healthy children (small scale media). It was less clear, however, whether counselling behaviour change techniques are being used, because few strategies to overcome barriers to behaviour change were reported by programme beneficiaries, and interactions with mothers were usually described as giving advice rather than as listening to mothers' concerns, helping them to decide what is best to do and strengthening their confidence to do it. The concept of counselling is relatively new in Nigeria, so further training and supportive supervision on the use of counselling techniques, especially in the initial phases of the IYCF programme, are likely needed to reinforce their use in the WINNN supported IYCF programme.

For exclusive breastfeeding, an important underlying barrier is a cultural belief that infants need water to survive. This strongly held belief means there is some distrust of the programme, which respondents felt could be overcome by repeated messaging and behaviour change strategies that target social norms, especially among authoritative family decision-makers, such as fathers and grandmothers. Targeting influential household decision makers will also be important for overcoming key barriers identified, for complementary feeding i.e., the availability and affordability of recommended foods, especially animal source foods, because husbands 'often control the family's food budget'. In Northern Nigeria, where the autonomy and decision-making power of women traditionally is restricted, effective social support behaviour change techniques are critical; and those implemented will need close monitoring and evaluation.

Strong and clear views were expressed on the messaging that was effective for both acceptance of the IYCF content and encouraging behaviour change, with the main views being 1) keep IYCF messaging distinct and separate from family planning; 2) reassure mothers and other family members that a large proportion of breast milk is water and therefore exclusive breastfeeding does not mean that a child gets no water; 3) focus on a limited number of locally available, affordable foods for complementary feeding; and 4) emphasise *visible changes* to a mother's or child's health after the adoption of recommended practices. Witnessing the health benefits to mother and child of early breastfeeding initiation and exclusive breastfeeding was reported to strongly contribute to the acceptance and trust of the IYCF program and to the uptake of exclusive breastfeeding. The consequent reduction in health care spending and perceived easy placenta removal, following early initiation of breastfeeding, were other important motivating factors reported by the beneficiaries.

Recommendations made by respondents to strengthen the behaviour change communication in the IYCF programme were to expand the range of behaviour change strategies used, strengthen the social support behaviour change strategies, and tailor messages to the local contexts with a focus on visible improvements in health. Food demonstrations, to develop confidence and skills in IYCF practices, and the use of mass media, to reinforce the messages and extend audience reach, were recommended. Community leader involvement was also perceived as key to programme message acceptance, especially among the influential household decision makers such as husbands. The promotion of a small number of doable actions, using counselling cards, which focused on nutritious, affordable locally available foods were recommended by CVs to encourage improved IYCF practices. Overall these results serve to support WINNN's draft IYCF strategy for 2015, which includes training CVs on voice and accountability; broadcasting IYCF jingles; creating IYCF behaviour change videos; and developing food demonstration protocols and recipe books.

Recommendations for WINNN

1. Review monitoring records to determine and strengthen the implementation of the community component of IYCF, as required
2. Develop and test material and/or non-material incentives for CVs such as providing of transportation allowance, for them to reach remote areas, or facilitating indirect mechanisms that would serve to improve livelihoods, the status of an IYCF CV or reduce their opportunity costs.
3. Review strategies for CV training and strengthen the system for supportive supervision, especially in relation to counselling techniques and facilitation of support groups;
4. Translate counselling cards into local languages using pictures of readily available local foods
5. Prioritise the promotion of a small number of context-specific doable actions rather than a broad range of improved practices
6. Reinforce and strengthen the use of examples of real healthy children who have been exclusively breastfed to enhance the acceptability of the messages and adoption of the behaviour change
7. Adopt multiple behaviour change techniques, including food demonstrations and professionally developed mass media messages tailored for men

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List of Abbreviations

ACF	Action Against Hunger (Action Contre la Faim)
ANC	Antenatal Care
CF	Complementary feeding
CMAM	Community Management of Acute Malnutrition
CV	Community Volunteer
DFID	UK Department for International Development
DPHC	Director of Primary Health Care
EPI	Extended Programme on Immunisation
FBFI	Food Basket Foundation International
FCV	Female community volunteer
FGD	Focus Group Discussion
GM	Grandmothers
HW	Health Worker
IDI	In-depth Interview
IYCF	Infant and Young Child Feeding
KB	Kebbi State
KT	Katsina State
LGA	Local Government Area
LSHTM	London School of Hygiene and Tropical Medicine
MCV	Male community volunteer
MDG	Millennium Development Goal
MNCHW	Maternal Neonatal Child Health Weeks
OPM	Oxford Policy Management
OR	Operations Research
ORIE	Operations Research and Impact Evaluation
R	Respondent
SCI	Save the Children International
UK	United Kingdom

WINNN	Working to Improve Nutrition in Northern Nigeria
WHO	World Health Organization

1 Introduction

The number of reported infant and maternal deaths, in Nigeria, is one of the highest in the world, and is second only to India (UNICEF, 2012a; WHO, 2013). Within Nigeria the under-five mortality rates range from as low as103 and 176 reported deaths per 1000 live births in the south-east and south-west zones, respectively to 260 and 276 reported deaths per 1000 births in the north-west and north-east zones, respectively (UNICEF, 2008). Further, the reported reduction in under-five mortality between 1990 and 2010 of 2% was well below the targeted 10% reduction per year required to meet the 2015 Millennium Development Goal 4 (MDG 4) (Murray et al, 2007); which meant Nigeria's progress towards achieving MDGs 4 and 5 was classified as insufficient (Bhutta et al, 2010).

In response, the UK Department for International Development (DFID) provided support for three direct nutrition intervention programmes in five selected states in northern Nigeria through its Working to Improve Nutrition in Northern Nigeria (WINNN) programme. WINNN is a 6-year 50 million Pound DFID-funded development project based in the northern Nigerian states of Katsina, Jigawa, Kebbi, Zamfara and Yobe. It focuses on improving the lives of over 6 million children through key high impact nutrition interventions; namely:

a) Delivery of effective Infant and Young Child Feeding (IYCF) interventions in selected states and LGAs in northern Nigeria,

b) Delivery of effective treatment for severe acute malnutrition through local health systems in selected states and local government authorities (LGAs) in northern Nigeria via its Community Management of Acute Malnutrition (CMAM) programme

c) Integration of micronutrient interventions into routine primary health services through its Maternal, Neonatal and Child Health Weeks (MCHNW), and

d) Strengthening of nutrition coordination and planning mechanisms at National and State levels.

A key challenge for improving nutrition, in northern Nigeria, is the successful implementation of programmes at scale. To help address these challenges, a series of operations research studies is being undertaken to help determine how to strengthen the DFID supported IYCF, CMAM and MNCHW programmes. This operations research aims to identify the reasons for key bottlenecks, which have been identified by WINNN, to successful programme implementation and to make recommendations on how to mitigate them. Ultimately, this series of studies aims to strengthen programme delivery and increase utilisation/ beneficiary demand to enhance programme scale-up.

In this report, results from the third series of operations studies, which have focused on the IYCF programme, are presented. It has focused on understanding how to strengthen the implementation and integration of the IYCF programme into the routine health services and the community; and how to effectively promote and support improved infant and young child feeding practices, especially exclusive breastfeeding and complementary feeding practices, in WINNN supported northern Nigerian states.

1.1 Overall Aim

To strengthen the implementation, integration into the health system, and long term sustainability of the IYCF programme in the WINNN supported northern Nigerian states to improve infant and young child feeding practices and prevent under-nutrition.

1.2 Objectives

1. To determine the opinions of health sector officials and IYCF programme beneficiaries about the implementation, benefits and challenges of the IYCF programme
2. To understand how the IYCF programme is implemented, managed and integrated into routine health services
3. To understand the motivation and long term commitment of health workers and community volunteers to the IYCF programme
4. To determine how to strengthen IYCF programme implementation to facilitate its integration into routine health services and meet the needs of IYCF programme staff and beneficiaries
5. To determine the barriers, motivators and facilitating factors for the adoption of the improved infant feeding practices being promoted in the IYCF programme
6. To determine how to strengthen the IYCF programme to better meet the needs of programme beneficiaries and motivate behaviour change towards improved infant feeding practices

2 Infant and Young Child Feeding Programmes

Under-nutrition is believed to contribute to approximately half of young child deaths in low income countries, as well as to impaired health, growth and development of young children (Black et al, 2008). To prevent under-nutrition, the WHO and UNICEF created the global strategy for infant and young child feeding (WHO, 2003) and the guiding principles for complementary feeding of the breastfed child (PAHO, 2001); which include IYCF recommendations such as exclusively breastfeeding for the first 6 months of life, complementing breastmilk from 6 to 24 months of age with a wide range of safely prepared and nutritious complementary foods, and following good feeding, hygiene and sanitation practices. These recommendations are based on evidence from the literature and have been shown to have a positive effect on infant growth in rural Bangladesh (Saha et al, 2008). They underscore the need to develop programmes that successfully promote the WHO recommended infant and young child feeding practises to prevent malnutrition in high risk populations.

Information on how to feed children is often delivered through the health sector, especially via health workers and doctors. However, other channels of information include commercial advertising by food manufacturers, other family members or prominent community members. Health workers often face challenges when encouraging mothers to feed young children according to recommended practices due to confusing and often conflicting information or barriers related to poverty, habitual behaviours, societal norms, or food availability/affordability. Inadequate knowledge, about appropriate IYCF is one barrier to good feeding practices. However, behaviour change solutions for IYCF programmes are notoriously difficult to effectively implement because behaviours are driven by complex factors, including audience-specific normative, habitual or preventative factors (Aboud & Singla, 2012). Improving knowledge, attitudes, beliefs and self-efficacy alone may not be sufficient for successful behaviour change. Instead a comprehensive package of behaviour change techniques are required including informational, performance-based, problem-solving, social support, materials and media techniques. Good training in IYCF counselling skills and culturally appropriate counselling materials are also essential to support these efforts (Briscoe & Aboud, 2012; FMOH, 2012a).

In Nigeria, an estimated 60% of all child deaths in the country are attributable to underlying malnutrition that results from poor infant and young child feeding and hygiene practices (FMOH, 2012a). For example, IYCF practices, in Nigeria, are characterised by low rates of early initiation of breastfeeding after birth, very low rates of exclusive breastfeeding and poor quality complementary foods that result in deficiencies of vitamins and minerals (FMOH, 2012a).

In view of these data, the Federal Ministry of Health, Nigeria, UNICEF and the World Health Organization have initiated programmes to promote optimal IYCF practices, including exclusive breast feeding for the first 6-months of life and sustained breastfeeding with the introduction of nutrient dense complementary foods from 6-months until at least 24 months of age (FMOH, 2012a). A 5-day *Integrated Infant and Young Child Feeding Counselling: A training course* was developed to train large numbers of health workers and community-based counsellors who care for mothers and young children. Counselling is a core activity in the programme. It aims to help women decide the best practices to follow from amongst various options or suggestions and to build their confidence to adopt their chosen practices. Counsellors are also trained about when to refer young children with severe acute malnutrition or other diseases to the health system for treatment.

The course is based on a set of 31 competencies the trainees are expected to learn during the course and then to perfect the skills through follow-up practice (FMOH, 2012a). They are trained to deliver up to 24 key messages using counselling cards (FMOH, 2012b). These key messages,

include information about nutrition for pregnant and lactating women (n= 1 message card), breastfeeding practices (n=10 message cards), hygiene practices (n=1 message card), complementary feeding practices (n=5 message cards), feeding a sick child (n=2 message cards), home fortification (n=1 message card), growth monitoring (n=1 message card), birth spacing (n=1 message card), fruit, vegetable and small animal farming (n=2 message cards) and when to take children to a health facility (n=1 message card),

3 IYCF practices in WINNN supported northern Nigerian States: ORIE Baseline Survey Results

The baseline survey, for the ORIE impact evaluation of the WINNN programme, was carried out, in June 2013, in 24 LGAs in the four states of Northern Nigeria in which the WINNN supported IYCF programme is being carried out (i.e., Kebbi, Katsina, Jigawa and Zamfara). Baseline IYCF practices of mothers with children 0-35 months of age were assessed via interviewer administered questionnaires; and the anthropometric status of these mothers and their 0-35 month old infants was assessed. These data were collected from 3355 households in WINNN supported intervention areas of which 837 and 840 households were in Katsina and Kebbi, respectively. The key baseline survey results, for IYCF practices and maternal and infant anthropometric status, are summarised here, for the WINNN supported LGAs in the four states (i.e., treatment areas; n=1677 households) to provide background information about the situation. Selected results are also presented for Kebbi and Katsina, in both the WINNN supported and non-supported LGAs (i.e., treatment and controls). The survey results are reported in detail elsewhere (Visram et al, 2014).

There is a high prevalence of impaired linear growth and acute malnutrition (wasting) among 0-35 month old children in the WINNN supported LGAs in these four northern Nigerian States (Visram et al, 2014). The overall prevalence of stunting was 57%; however, it progressively increased with age, ranging from a low of 27% among 0-5 month old infants to a high of 71% in 18-23 month old age group, remaining relatively constant across the 18 to 35 months of age range. The overall prevalence of wasting was 15%; and ranged from 9% in the 24-35 month old age group to 23% in the 6-11 month old age group. The overall patterns of growth suggest the process of malnutrition is occurring from conception to about 18 months of age; and is related to both the quantity and quality of complementary foods, as well as maternal under-nutrition/health and infant health status. In the sub-sample of children in Kebbi and Katsina, the overall percentage of stunting and wasting was 51% and 64%, for stunting, and 19% and 15%, for wasting, respectively. In both states, the prevalence of wasting remains high across the 0-35 month old age range (10-26%, depending on the state and age group). This prevalence suggest that severe acute malnutrition is of crisis proportions among young children in these two States and urgently needs to be addressed to save lives and human potential (de Onis, 1997).

The ORIE baseline survey results suggest that, to prevent the under-nutrition, in Northern Nigeria, intervention programmes will need to address maternal under-nutrition, food insecurity, poor infant and young child feeding practices (the quality and quantity) and the environmental factors contributing to poor health status and under-nutrition. However, for sustainable improvements, these interventions must take into account the high levels of poverty, low levels of formal education, low maternal autonomy and the household decision making patterns reported in the area. For example, 67% of household heads and 87% of mothers received no formal education, 56% of women required their husband's permission to go alone to the market, 97% needed his permission to go to the nearest health facility and over 94% of husbands have some influence on decisions regarding child health care and food purchases (Visram et al, 2014). Further, less than half of mothers had ever attended antenatal services at a health facility (43%) and most births were home births (90%), which suggest a community-based intervention is required.

The IYCF programme, as described in sub-section 2 above, is designed to prevent infant under-nutrition through behaviour change by promoting optimal breastfeeding and infant and young child complementary feeding practices, as well as good hygiene and health seeking behaviour practices. Sub-optimal infant and young child breast feeding and complementary feeding practices can be the result of low levels of knowledge, social-cultural beliefs/influences or inadequate access to

nutritious foods, adequate health care facilities or health care products, such as soap. The ORIE baseline survey results show that relatively few mothers had received information, during the previous month, about recommended IYCF practices from a health facility (20%) or from any source (33%) across the 4 WINNN supported states. There were state-related differences comparing the results for Kebbi and Katsina, which suggest a higher percentage of mothers in Katsina than Kebbi had received health-facility-based (28% vs. 8%) and community-based (11% vs. 5%)information. The type of information mothers had received across all states was predominantly about breastfeeding (86%), hygiene practices (70%), feeding a sick child (57%) and complementary feeding (31%). Comparing Kebbi and Katsina, a higher percentage of mothers in Katsina than in Kebbi had received information about complementary feeding (26 vs. 17%) and birth spacing (24 vs. 11%) and a lower percentage had received information about feeding a sick child (44 vs. 65%). In both states information about breastfeeding and hygiene practices was the most common type of information received (i.e. >70% among those who received information) (Visram et al, 2014).

The level of mother's knowledge and practices about recommended infant and young child feeding practices was mixed. Over half of the mothers knew breastfeeding should start immediately after birth (59%) and colostrums is good for their infant (78%), whereas few mothers knew water should not be fed water to young infants (8%) and just over one third of mothers thought infants should be exclusively breastfed for 6 months (37%). Even though reported breastfeeding rates were very high (99.8% initiated and 91.7% continued at 12-15 m of age), the reported prevalence of exclusive breastfeeding was low (11.6% of children <6 months of age in all four states; and only 6% in Kebbi and 4% in Katsina). The reason, for the apparent discrepancy comparing exclusively breastfeeding rates presented for all states vs. Kebbi and Katsina are that the results presented for all states represent only the WINNN supported LGAs (i.e., treatment areas) whereas the results presented by state include both WINNN supported and non-supported LGAs (i.e., treatment and controls).

The reported complementary feeding practices were also sub-optimal. For 6-23 month old infants, on the previous day, only 24% (21% in Kebbi and 31% in Katsina) were reported to have been fed the recommended minimum number of meals per day; only 14% (10% in Kebbi and 16% in Katsina) were reported to have been fed the recommended number of ≥ 4 food groups a day and only 5% (3% in Kebbi and 7% in Katsina) were reported to have been fed a minimum acceptable diet (WHO, 2008; Visram, 2014). For recommended breastfeeding practices, a lack of knowledge about feeding water to young infants might partially account for the low reported exclusive breastfeeding rates. In contrast, it is not known whether the reported poor complementary feeding practices relate to lack of knowledge of recommended practices; or to other barriers, such food availability or affordability. Comparing baseline data for Kebbi and Katsina, suggests mothers in Katsina had slightly greater exposure to nutrition messages and slightly better reported infant feeding practices than in Kebbi; which is in contrast to the anthropometric data showing slightly lower rates of under-nutrition in Kebbi than Katsina. These inter-state differences, however, are minor; instead the results indicate an urgent need, for affective programmes, to improve infant and young child feeding knowledge and practices in Northern Nigerian states; and reduce the very high rates of malnutrition. For long term success in reducing infant/child mortality and improving child health and development, high quality, context appropriate IYCF programmes are needed to help prevent malnutrition. To support the development of effective IYCF programmes, in Northern Nigeria, operations research is needed to help guide the process.

4 Methods

4.1 Study Setting

The IYCF study was conducted in two of the five WINNN states in northern Nigeria: Kebbi and Katsina States.

4.2 Study Ethics, Design and Sampling

4.2.1 Ethics

The study was approved by the National Health Research Ethics Committee of Nigeria (NHREC) and the London School of Hygiene and Tropical Medicine. Informed verbal consent was obtained from all the participants.

4.2.2 Study Design and Sampling

The IYCF study was conducted, in September 2014, in two of the five WINNN states: Kebbi and Katsina States. The data were collected through focus group discussions (FGDs; n=44) and in-depth interviews (IDIs; n=27). Focus group discussions (FGD) were held with mothers (pregnant or who had a child 0-23 months of age) who had and who had not participated in the community-based IYCF group sessions; with grandmothers in the communities, with male IYCF programme beneficiaries and with male and female community volunteers who had facilitated the IYCF sessions (Table 4.1). In-depth interviews (IDIs) were held with health sector officials, IYCF programme health workers, one father and two male community volunteers (Table 4.2).

In each State, two WINNN LGAs were purposefully selected based on the presence of a WINNN IYCF programme. These LGAs were Gwandu and Maiyama in Kebbi, and Bakori and Jibia in Katsina. Within each LGA, FGD participants were purposively selected from two defined strata. These strata were defined by urban versus rural locations; and within each stratum, homogenous FGDs were conducted (Figure 4.1).

Within eachState, IDI participants were purposively selected to include State and LGA level officials with a range of responsibilities for the IYCF programme at the State (n=7 IDIs) or LGA (n=8 IDIs) levels. The officials included the State Directors of the IYCF programme, State Nutrition officers, State Health Educator, State coordinator of Maternal and Child Health and LGA Nutrition officers. IDIs were also done with health workers who were involved in the implementation and management (n=8 IDIs) of the IYCF programme. IDIs were also carried out with one father and three male community volunteers from Kebbi state (n=4).

Figure 4.1: Sampling strata for FGDs and IDIs

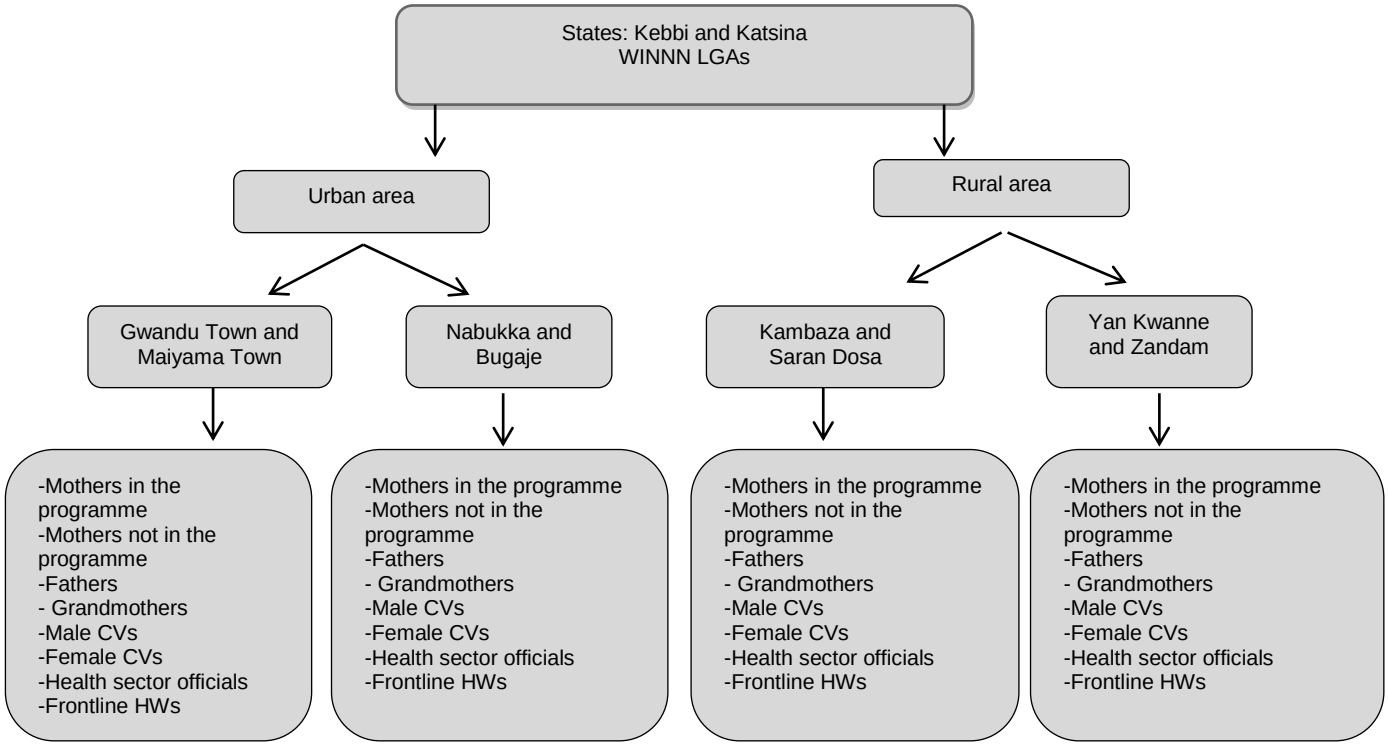


Table 4.1: Total number of FGDs conducted

FGD Strata	Number conducted
FGDs with women who had attended community-based IYCF group sessions	8
FGDs with women who had never attended a community-based IYCF group or individual counselling session	8
FGDs with female CVs involved in facilitating community-based sessions in the IYCF programme	8
FGDs with male CVs involved in facilitating community-based sessions in the IYCF programme	6
FGDs with fathers	7
FGDs with Grandmothers	7
TOTAL	**44**

Table 4.2: Total number of IDIs conducted

IDI Strata	Number conducted
IDIs with fathers	1
IDIs with male CVs involved in facilitating community-based IYCF sessions in the IYCF programme	3
IDIs with health workers involved in the IYCF programme	8
IDIs with WINNN IYCF Advisor	2
IDIs with State Nutrition Officers	2
IDIs with LGA Nutrition Officers	4
IDIs with Director of Primary Health Care (DPHC)	5
IDI with State Health Educator	1
IDI with State acting coordinator MCH	1
TOTAL	**27**

4.2.1 Data collection and management

Theme guides were developed for each FGD and IDI category (Annex A). These theme guides were pre-tested in a pilot study and further refined before use. The data were collected by eight field workers (four men and four women) who were from Jigawa State, Northern Nigeria and fluent in speaking Hausa and English. They were trained by experienced qualitative research trainers from Food Basket Foundation International (FBFI) and Oxford Policy Management (OPM). They were supervised on a daily basis by the female study co-ordinator (CYD) from OPM and another trained male qualitative researcher from FBFI.

The IDIs and FGDs were conducted in Hausa or English, depending on the participants preferred language of communication; and recorded using a digital recorder (Olympus Digital Recorder VN-711-PC) after verbal consent had been obtained from the participants. Field notes were also taken during the FGDs and IDIs. At the end of each day, these notes and recorded interviews/discussions were reviewed by the supervisors to ensure data quality, identify unanticipated emerging themes to explore through additional IDIs or probing and to provide individual advice on how to improve subsequent IDIs and FGDs.

All FGDs and IDIs, which had been conducted in Hausa, were first translated into English. All FGDs and IDIs were transcribed verbatim by seven independent and experienced translators/transcribers who were fluent in both Hausa and English. All transcribed data were de-identified and given labels based upon their FGD strata, person numbers within the FGD, and numbered interviewee in the IDIs.

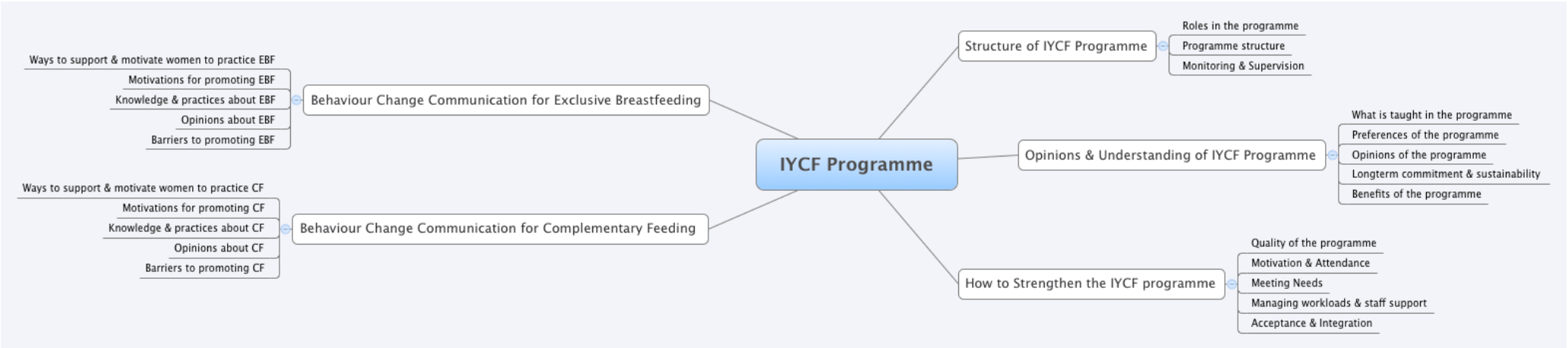
4.2.2 Coding and data analysis

Data were transferred to NVivo 10 for coding by a research assistant (JH). In this process, each of the transcribed FGD and IDI were labelled using consecutive numbers to ensure easy identification and referencing. A primary coding framework was developed by members of the research team (CYD, JW, JH, EF) based upon the objectives of the study including: structure and implementation of the IYCF programme, opinions and understanding of the IYCF programme, how to strengthen the IYCF programme, barriers and facilitators of exclusive breastfeeding and complementary feeding. During data coding, the primary coding framework was expanded to incorporate newly emergent themes (Figure 4.2).

The second stage of the analysis, in which data were further synthesised, was carried out by three members of the research team (JW, JH, and EF). As a group, the research team compared themes across interview strata (i.e., health sector officials, mothers in the programme, fathers, grandmothers, CVs and health workers) in order to assess and synthesize the perceptions and experiences of these different groups of people.

In the third stage of the analyses, the report was circulated, for further interpretation and comments, to other members of the research and WINNN implementation teams, including both Nigerian (OA, Cy-D, IO, DO, OO) and non-Nigerian (EJ, KL, MG, PM) team members.

Figure 4.2: Primary coding framework



4.2.3 Quality Control

To ensure the quality of data collection, fieldworkers were extensively trained in the field on FGD and IDI techniques. Pre-tested theme guides were used for the FGDs and semi-structured interview guides were used for the IDIs to ensure the desired information was collected. A pilot study was carried out to test the FGD theme and IDI interview guides and for the fieldworkers to familiarise themselves with the study topic and tools. The pilot study results were reviewed by the trainers and other members of the OR research team and adjustments were made to the theme and interview guides. During the data collection, discussions were held with fieldworkers on achieving more depth in the FGDs and IDIs.

To ensure objective data capture, all FGDs and IDIs were digitally recorded and reviewed daily by the study co-ordinators (CYD and HL). All recorded data were translated and transcribed verbatim by transcribers who were fluent in Hausa and English. A member of the study team (CYD) who is also fluent in Hausa and English listened to a sample of the recordings and read through the corresponding transcripts to ensure that the translation and transcription were properly carried out.

Although one individual (JH) completed all data coding and the preliminary data analyses, two research team members reviewed the results in depth (JW,EF) and both Nigerian and non-Nigerian members of the ORIE research team (CYD, EJ,OA) and WINNN team (IO, DO, OO, PM, KL, MG) reviewed the report and its interpretation.

5 Results

A total of 27 IDIs and 44 FGDs were conducted with mothers both in and not in the programme, fathers, grandmothers, female and male community volunteers (CVs), health workers and health sector officials at both the LGA and state levels. However, 3 FGDs were subsequently excluded from the analysis due to poor transcription quality (one from fathers in Kebbi state, one from male CVs and one from mothers in the programme, both in Katsina state) and thus 41 FGDs were used in the analysis.

The themes and sub-themes identified through the coding framework are presented in the text below and linked back to the original objectives. Overall there was strong agreement across states and participants regarding acceptance of the IYCF programme and the benefits of following the recommendations. There were some small variances in implementation and structure of the programme between states, which are discussed in more detail below.

5.1 Opinions of IYCF programme

The general opinion of the IYCF programme across all strata and LGAs was that it is a good programme that has been implemented to help improve the health of young children in the community. There were no dissenting voices among those interviewed, but many participants reported that IYCF health messages were not accepted by everyone and that there may be some dissent among certain groups (such as TBAs) if they felt that their livelihood was threatened. The programme was accepted and appreciated by the communities, although most participants agreed that there were still challenges with acceptance of some health messages, specifically with exclusive breastfeeding and not giving water to babies in the first 6 months.

Health sector officials, health workers and CVs felt that the communities supported the programme and that acceptance was growing despite ongoing challenges to shift core beliefs and practices. Health sector officials and health workers agreed that the training was good and sufficient but that re-training should be regular, especially to keep the CVs motivated and informed. There was a strong message from CVs that regular refresher training would be beneficial but they agreed that the content delivered through the training was adequate.

Box 5.1: Illustrative quotes for opinions of health sector officials and health staff

"R: Their opinion is good, seriously it is good. They don't have any negative opinion; they even say please where did you people get this type of thing from, who taught you how to do it? Which magic are you people using that people are listening to you? They don't have any negative opinion about it, they are happy. They are happy, like a community we stopped going to, we stopped going because of security challenge, they are begging us to please come back. So I have not heard or experienced any negative opinion." IDI-68-KT (health sector official)

R1: Well our opinion is; we are happy with the program because we have seen improvement in our community and because formerly we used to have a lot of problems with our children, but as a result of this training, we also go round to sensitize people in town, truly we have made progress." FGD-33-KB male CVs (MCVs)

R2: Truly we agree with the messages given because they will not give us anything that will harm us, they will only give us what will help us and our children, we are grateful." FGD-31-KT female CVs (FCVs)

"R2: Firstly, the obstacles we faced was at the beginning when it wasn't clear and so people were sceptical but later, some accepted it especially when they saw the achievements, then they followed." FGD-33-KB (MCVs)
R6: Additional explanation on this is; there are people who bring their children to this hospital and spend a lot of money to get health for their children, but as a result of brining this program to this (mentions town), people come from far and near and they come back to testify that they are happy that their children are healthy and can move around." FGD-40-KT (MCVs)

Beneficiaries across all strata were very positive about the programme and many were vocal about the need for the programme to extend into other communities so the health benefits could spread. There were no dissenting voices among those beneficiaries interviewed about the programme but several mentioned that not everyone accepted the messages yet, and there is still work to be done to increase the uptake of the IYCF health messages as giving water to babies under 6 months is still a strong cultural belief within these communities.

Box 5.2: Illustrative quotes of opinions of beneficiaries

"R: what we want is for you to expand it, it is from you we were encouraged to strengthen it." IDI-12-KB (father)

R1: in our lives, we have seen improvement and this has encouraged us, and we thank the government and organizers of this program." FGD-9-KB (fathers)

R2: people with wrong perception on the program, because they normally say that if a child died then the mother has not given him water even once." FGD-47-KT (mothers in programme)

R6: This program that helps to enlighten us on the care of our children should please be continued. They should continue to help us and we are also doing our best to care for the children. FGD-42-KB (mothers in programme)

R4: This program? We understand this program very much that it helps a lot towards the health of our children because ever since they brought this program, we have tried it and have seen that we are satisfied and have seen changes with our children. FGD-18-KB (GM)

5.2 Benefits of IYCF programme

The main benefit of the IYCF programme reported across all participant strata was that of improved infant health from exclusive breastfeeding. Both fathers and mothers described breastfed only babies as having less illness, particularly diarrhoea, and looking healthier when compared to babies who had been given water. Some participants perceived there to be lower infant mortality now that women were practicing exclusive breastfeeding. Some fathers reported that their wives had improved their hygiene practices. One mother in the program described the link between seeing the benefits and practicing the recommendations. Several female CVs reported practicing exclusive breastfeeding with their own infants and noted better health outcomes for the breastfed baby compared with previous infants who were fed a mixture of breast milk and water. The reduction in money spent on hospitals and drugs for sick babies was noted as a secondary benefit to having healthier infants.

Another important benefit of the IYCF programme mentioned by health workers was increased acceptance and attendance at antenatal clinics (ANC) and childhood immunization clinics. Male and female CVs in both Kebbi and Katsina states also described the link between exclusive breastfeeding for 6 months and delayed menstruation leading to natural family planning as a benefit of the IYCF health messages.

Box 5.3: Illustrative quotes on the benefits of the IYCF programme

"R10: The major thing is that children will grow up very healthy. Second is that women learn how to be clean at all times because they teach them on how to take care of their bodies and their children, in essence their hygiene habits is really improving unlike before that they used to be dirty." FGD-11-KB (fathers)

"R3: for me since I have been following this programme accordingly, I have not gone to the hospital that my baby is sick. R6: because of this programme you will see you baby looking real good and healthy which others always like to carry your baby because of the good looks and good health condition." FGD-48-KT (mothers in the programme)

R: ... the immunization program truly also got support because truly before this program, associations were formed, the people were being followed to be given drugs, and they did not understand it. But this program as it were, women and men were recruited who go from house to house, they have their little books with pictures where they explain to people until gradually they began to understand the message and now when you go to the houses for immunization you don't hear that there was no"compliance" everyone accepted it insha Allahu. IDI-2-KB (HW)

"R7: When a woman embarks on this exclusive breastfeeding, it helps in the area of family planning; she doesn't have to meet the doctor." FGD-38-KT (MCVs)

"R1: what we see is it that they said if a baby is born we shouldn't give him water and we have done that and we have seen the success in that, and when they said when a woman puts to bed and the placenta doesn't follow we should give our support that the umbilical cord be cut and the baby should be put to the breast to suck once he sucks the placenta would fall out, we have done that more than once and we have gotten successes. R2: we have gotten successes" FGD-26 (FCVs)

5.3 Implementation and Structure of the IYCF programme

5.3.1 Implementation of the program in hospitals and communities

There were two main components of the IYCF programme as described by participants; hospital or health facility based discussions mainly led by health workers, and community sensitisation by the CVs. Health workers described their main tasks as supervising the community sessions and giving one-to-one counselling with women at the hospital, particularly for more difficult cases. This description of the role of health workers seemed to be consistent across both Kebbi and Katsina state. Both health workers and CVs described the main role of the CVs as performing sensitisation in the communities. Sensitisation was done by going from house to house, attending large ceremonies (weddings, naming ceremonies etc.) and informing people about upcoming IYCF meetings. The female CVs reported discussing the importance of exclusive breastfeeding, good complementary feeding and hygiene practices, immunisation and ANC attendance with the mothers to improve IYCF practices and encourage health seeking behaviour. The male CVs reported discussing with the fathers and head of households on how they can support their wives to practice the IYCF health messages. House visits by CVs and meetings at the hospital were the most frequently reported activities of the IYCF programme across the participant strata. Some CVs reported regular meetings with women in support groups, although it was not clear if the support group consisted of the same women each time.

Box 5.4: Illustrative quotes from staff on implementation of the IYCF programme

R: Okay, my role is; I supervise the three support groups during their meetings, so I will go there and see what they are doing and I ask them the topics that they discuss during the meeting. I visit them whenever they have their meetings. IDI-3-KB (HW)

R: We go round to ensure that the messages they have given has reached them. And we go to the community head or a stakeholder to pay advocacy visit. IDI-6-KT (HW)

R3: We go house to house all the time, we go round homes to sensitize women and educate them on this exclusive breastfeeding and personal hygiene, and also give nutritious foods for those who are old enough to eat, and any other thing that will help them, we inform them. FGD-27-KB (FCVs)

R4: ... What we do as an organization is to go into towns teaching and sensitizing people regarding this program and we advise them that when the child has this problem of malnutrition, we send them to the hospital and anyone that hasn't gone or the child is in some sort of problem, we beg the mother to try to take the child to the hospital. R1: we gather them {at the hospital} and teach them and demonstrate to them how to breastfeed and then we go round to gatherings and homes and teach them using pictures which show children who have been breastfed and those that haven't. So

both men and women are taught. FGD-31-KT (FCVs)

R2: Okay, I can just give an example and others can add to it since I am not the only one. So there are many activities, like every week we plan the areas we go like Islamic schools, celebration gatherings, naming ceremonies to show them the importance of exclusive breastfeeding and they show them when they reach six months, the kind of foods they are to give the child, like the kind of food we have here in the village, but lack of knowledge on what to combine with what to achieve something, like spinach,
beans, groundnut, soy beans, etc. we have them all at home and you don't have to buy because we farm them. If we knew the importance or we were taught from the beginning, there wouldn't be any problem and people will know the importance. FGD-38-KT (MCVs)

Mothers from communities in Kebbi state reported being visited at their homes by CVs and given information about breastfeeding and infant feeding. They also reported being informed by community leaders about upcoming meetings where topics related to infant feeding were discussed. The mothers reported being told to attend ANC at the hospital, to breastfeed exclusively for the first 6 months and they were given advice on nutritious foods for infants. The fathers described being advised to support their wives with the uptake of the health messages.

Box 5.5: Illustrative quotes from beneficiaries on IYCF implementation in Kebbi state

R5: The group leaders came to our houses to inform us of a gathering of which we attended. They talked to us about antenatal care during pregnancy, what to eat and how to care for the baby. FGD-42-KB (mothers in programme)

I: Do they send you to any other hospital from your hospital to go and learn from them? R8: Mostly we learn from gatherings that are organized. R9: Our elders told us about the gatherings that are taking place. R10: It is all the same. R8: There was a gathering about this program (IYCF) last year and I attended it. FGD-42-KB (mothers in programme)

R10: What I know is that the program is about feeding babies with only breast milk from birth until they are able to eat food. R11: What I know is that some teachers bring us books to our homes showing us the difference between those that were given water and how they look and those that weren't given water and their appearance as well. They are up to three categories and the one that wasn't given water looks the healthiest. FGD-42-KB (mothers in programme)

R5: Women are being called together in respect to this program and children R6: Before the meeting, they go house to house to inform women of the time and venue of the meeting, women who are chanced make it, others who are not don't. All these things we are being taught, if a woman takes it, fine, if she does not that's fine. FGD-45-KB (mothers in programme)

I: Do they send you from the hospital to town to attend this program? R5: Yes they do; there are some women they send into the communities to enlighten them on the importance of it. Chorus: Yes they send us. R2: They send us to tell others to corporate and accept. FGD-44-KB (mothers in programme)

R5: it is the health workers who inform us, they will gather us and educate us and we will in turn tell our wives that they should do exclusive breastfeeding.? R5: There is {an opportunity given to discuss the programme}; there is this person {mentions name of person} has called us once and explains to us and all those in authority at homes. There are some that give pamphlets with pictures of healthy children to us to distribute to household heads. FGD-9-KB (fathers)

In Katsina state, there was discordance between beneficiaries of the programme and the CVs as to how established the community component of the IYCF programme was in practice. Even though the CVs mentioned carrying out sensitisation in the communities by conducting house visits, mothers and fathers interviewed reported meeting only at the hospital. For example, mothers in Katsina state reported attending meetings at the hospital where they learned about exclusive breastfeeding, infant feeding practices and were shown pictures with examples. However, the mothers included in this study reported that they did not receive home visits from CVs and that all discussions and meetings were carried out at the hospital. Despite this possible inter-state difference with community implementation of the IYCF programme, they reported meeting regularly and learning content that matched those in Kebbi state.

Box 5.6: Illustrative quotes from beneficiaries on IYCF implementation in Katsina state

R1: honestly they hardly go from house to house sensitizing mothers. We always go to the hospital except for some times when they are giving mothers drugs, that's when they come around. R2: and when they are checking the health of children. R1: they select us into this programme because if they give us advice on our babies we follow R4: in the hospital {they gather them around to discuss and explain IYCF}. R1: well, they do this every Friday of the week because they have more population on that day than any other days of the week. FGD-48-KT (mothers in programme)

R2: yes they usually ask us to join {the hospital programme}…. and also the people also advise us on what to do. IR8: They usually send us to the people {at the hospital} and the people try and educate us on what we don't know. FGD-47-KT (mothers in programme)

R: the hospital {where they meet for discussions} R: the hospital…. R1: At the end of every month, because if we stay much longer then we can forget some of the things that we are taught. FGD-47-KT (mothers in programme)

R5: ... we do not have any association { programme} that gathers people except for times when God brings visitors like you, then the leaders will ask us to gather, then we contribute our opinion R5: Truly we have not been enrolled into any association {programme} to hear the purpose of their gathering. FGD-13-KT (fathers)

R4: well whatever is done, the community head calls on us and informs us that there will be visitors {recruits them into IYCF programme} and so on just as we were called today, so whatever will be done earlier they inform us and ask for our corporation to do it. FGD-14-KT (fathers)

5.3.2 Integration of IYCF into existing health services

There was broad consensus among health sector officials that the IYCF programme was integrated into existing health services, in particular within ANC and immunisation services. Integration was mainly perceived as IYCF health messages being delivered and/or reinforced during other health services, such as ANC, immunization and CMAM, and key messages about other health programmes being delivered through IYCF. Health workers and CVs reported telling mothers to attend ANC and giving information about the CMAM programme during IYCF sessions. The strong integration of IYCF with other services is nicely illustrated in the following quote:

"IYCF says that you should not allow sickness or malnutrition to set in, IYCF says that for women when they get pregnant they should attend ante natal because it is at the ante natal that you would be told the kind of good quality food to eat, IYCF again says that babies should come for vaccinations because every vaccination doesn't go beyond one year and in this one year, in the IYCF program the weight of the baby is checked every month so he comes for post natal then he would be checked how well he has been fed on breast milk and the vaccine he has taken. That's all, IYCF has become something that is important to the people in a lot of ways" IDI-66-KT (health sector official)

There was a perception from some health sector officials that IYCF had resulted in higher attendance at ANC. This was due to several factors: 1) the positive messages from their peers on IYCF [and ANC seen as the source]; 2) better communication with health workers in ANC; and 3) CVs sending women to ANC. Alongside the perceived increase in attendance, the health workers were perceived by programme staff to have improved the quality of the health messages delivered to women during ANC. The reason for this improvement was they were given clear guidance on the messages to be delivered. The only negative comment regarding integration from one health worker was the challenge of merging IYCF and other programmes, such as immunizations, due to a lack of staff to carry out the work.

The IYCF programme was perceived as being complementary to ANC and adding prevention to the CMAM programme. Health messages about attending ANC, getting children immunized and preventing malnutrition are reportedly being delivered through the IYCF programme in addition to the messages about breastfeeding and complementary feeding. Together with IYCF being perceived as integrated into existing programmes it was also seen to have expanded the reach of messaging from programmes through CVs at the community level.

In general, health workers interviewed in Kebbi state seemed to have a clearer understanding of integration and how it worked within the IYCF programme. They were able to describe the link between IYCF and other health programmes and had a clear vision of the benefits of merging the programmes. Two health workers from Katsina state mentioned giving IYCF messages during ANC classes but the larger concept of merging the programmes wasn't discussed.

Box 5.7: Illustrative quotes for integration of IYCF programme

"R: okay the changes is the increase in the number of women that attend the ante natal clinic because each one has heard about what IYCF does from pregnancy, and they want t to try it, some have tried and seen the benefit " IDI-66-KT (health sector official)

"R: There is not much problem because they are working hand in hand, yes they are working hand in hand, because in IYCF, we tell the pregnant women to eat more, and when they come for ANC, we still tell them to eat more, and if they are sick, let them come to the clinic. And in immunization, we used to tell them that it is not when a child is sick that you bring him for immunization, because immunization is for healthy children. So in IYCF, still we used to tell them, because immunizations not something that when somebody is sick, or ANC when somebody is sick – No, they should always come. R: On immunization days, because we don't have too much people on immunization days, so the few we get, we tell them because they don't come in group, it is only the few ones that come, but we are trying out best so that they will know the importance of immunization during this IYCF." IDI-3-KB (HW)

"R: And then it has also helped the facility staffs to talk to mothers, they can counsel mothers very well now. And they have something to tell them. Before this program, maybe they had a seal, but they were not counselling mothers. They didn't have topics to discuss with mothers, they didn't know how to discuss with mothers that could give them that satisfaction of maybe to have come to the hospital." IDI-68-KT (health sector official)

"The thing came as already integrated, because this IYCF you know there are organizations that are set up that are called support groups, these groups go from house to house to inform people and it is through this they would bring the discussion of malnutrition into it, immunization, in the process of sharing information they would bring in the discussion of ANC and the danger signs which if not paid attention to is harmful to the pregnant woman. So you see it is an opportunity this IYCF it opened a lot of ways through which other things can be brought into the health sector" IDI-64-KT (health sector official)

R: Well, lack of staffs to do the work {is the challenge when merge programmes} " IDI-1-KB (HW)

R: the messages. Firstly like I have been repeating, there is not giving the child water, and then there is giving the child food after six months, and then there is cleanliness, and then there is immunization and there is counselling and when the child is sick, he should be taken to the hospital." IDI-3-KB (HW)

R3: We learnt about the exclusive breastfeeding and body building foods and also going for immunization, and when you take in, you continue to observe those advices given. FGD-44-KB (mothers in programme)

5.3.3 IYCF referral system between hospital and community

Health workers and CVs reported an active referral system between the hospital and the community. The CVs reported actively sending women to the hospital if they felt they needed further instruction or if a potential health issue with mother or child was identified. They also reported encouraging women to attend ANC and immunisation sessions at the hospital. Some health workers described referring women to the local community meetings for on-going support with feeding practices, but it was mentioned less frequently than CVs reporting hospital referrals.

Across the communities, mothers reported hearing about and joining the IYCF programme through different means. Some mothers reported being referred to their local community support group through the health workers at the hospital or through their local CVs, but more frequently mothers reported attending meetings because they had heard about it from the local elder.

Box 5.8: Illustrative quotes for referral system between hospital and community

"R: Yes, what the health worker does is; after counselling the woman at the facility, he will ask the woman which of the community is she from so that he can also her that there is a support group in that community where she can join and become a member to preach the IYCF message which she has heard in the hospital." IDI-58-KB (health sector official)

R: The ways they send people to us here in the hospital is by explaining to them the importance of immunization and then the importance of health care. I: And for you here, what ways do you follow to make them send people to you here? R: when they come to the hospital, we encourage them very much, we educate them on the importance of cleanliness, and show them that most of the sicknesses come from lack of cleanliness. IDI-6-KT (HW)

R3: Yes they {at the hospital} send to us R3: The health workers, those that distribute drugs to the children, they send parents of the children and after they have sent them, they tell us to go and further sensitize them on the need for breastfeeding the infant." FGD-33-KB (MCVs)

R2: we had a dialogue with them{ mothers, husbands or grandparents} to discuss the challenges of mothers and pregnant women because it is risky staying with a new born and so it is important to sit with them and sort out issues. A pregnant woman need support with body building foods and antenatal care up to the time of delivery because no one can detect whether there will be complications, and she is advised on immunizations. So it has really helped. R4: I said we go to homes and educate pregnant women and their husbands, we advise them to go to the hospital for antenatal where they could identify any complications early and give them medicine and run tests. FGD-25-KB (FCVs)

R5: Yes, they {at the hospital} send them, they may tell them to go to this venue, at this time for a meeting." FGD-27-KB (FCVs)

"R5: As for the women, there are women we send to them. And then there are some who come down to the hospital and the health workers teach them more, we tell them that anyone that doesn't fully understand should come to the hospital" FGD-38-KT (MCVs)

5.3.4 Monitoring and Supervision

The CVs strongly expressed their opinion that supervision was important to maintaining the quality of the programme and they were vocal about wanting more follow-up. Health workers and CVs drew a clear link between regular supervision and improvements to the programme. One male CV said it gives the work a greater feeling of importance if they are followed regularly, while another male CV suggested that the presence of a supervisor at the community meetings gave the beneficiaries' confidence that the programme was running correctly.

There was agreement across health sector officials, health workers and CVs that it was the duty of the health workers to supervise the implementation of the program at the community level. It was less clear who was meant to be supervising the health workers although two health workers from Katsina State mentioned a person from the "office" comes to give them advice.

There was a sense from the data that supervision and follow-up in Katsina State was more defined and regular than in Kebbi State. Several CVs from Kebbi reported a lack of supervision and asked explicitly that supervision and monitoring be improved. In contrast, CVs from Katsina State were able to respond definitively about the last time they were supervised.

Box 5.9: Illustrative quotes on state differences with monitoring and supervision

In Kebbi state:
R: The corrections {supervision} are made at ward level and LGA level ; R: They come here and hold seminars with us, R: We also go there for meetings that how we hold them R: The last corrections, I can't remember the date." IDI-2-KB (HW)

R: Well, even supportive supervision is good because when they check your work regularly, you will improve, because if

they don't check it regularly, sometimes, they can come unannounced and they will see that it is not good, but when they are checked regularly, then we will improve." IDI-3-KB (HW)

R5: Definitely {feel supervision is important}I; R4: the importance? Because anytime there is a meeting, whatever you don't know, you will know it, and it will be recorded that on that day, there was a meeting R5: it is up to a year now {since they were last supervised} R6: since last year I: since last year? Chorus: Yes. R5: We feel very bad that no one supervises us R4: it helps when they come to check on us." FGD-28-KB (FCVs)

R: what {challenges} we uh face {in our work} uhm…. In this program, like some of our leaders or facilitators are not consistent, they don't come for our meetings always because we get encouraged whenever we see them at our meeting with the drinks we get. Whenever you tell fathers that these facilitators would come they get excited." IDI-35-KB (MCV)

In Katsina state:
Chorus: They do {supervise}, very much I Chorus: It {supervision} is important R8: To check whether we go or not IR4: the last {supervision} was on the 25th of last month R8: That was the last time. FGD-30-KT (FCVs)

R3: last Monday {supervisor came} R7: Every Monday we are always with her and she comes on this. She will meet about 300 women coming to collect that malnutrition milk. And it is rare for her to be absent. R3: And then her coming gives people confidence that what we are doing is right, when they see two to three cars and we exchanging papers, it helps a lot. R6: Truly we are we enjoy their coming because if a supervisor is strict, you cannot learn from him, but she is very friendly and she will show you what to do gently and with a lot of jokes. FGD-38-KT (MCVs)

R: sometimes we are in the middle of the work and you will just see them {supervisors}, you don't even know that they are coming and when they inform you, you are sure to see them R: yes… {name of supervisor} comes, uhm… this person comes… {name of supervisor}, one {name of supervisor}, comes, from the office they come. Three Saturdays back or four Saturdays back they came about seven of them R: honestly it {supervision} is okay because if there is any correction they would give it, there is no one that can say they do something a hundred percent except Allah. IDI-7-KT (HW)

5.4 Strengthening the IYCF programme

5.4.1 Acceptance of the IYCF programme

Among the staff and beneficiaries interviewed acceptance of the IYCF programme was high. Across all levels of health sector officials there was broad consensus that communities accepted the programme and the messages being delivered. Beneficiaries that were interviewed accepted the programme and its messages but reported that within the communities there were individuals who did not yet accept the messages. Both beneficiaries and CVs reported that acceptance of the health messages was a gradual process and that people were initially sceptical of the messages, particularly the instruction not to give water to the babies in the first six months. Among CVs and health workers interviewed there was a sense that acceptance was growing but that working with relatives, particularly grandmothers and fathers, to shift the current practice of feeding babies under 6 months with water was key to gaining wider acceptance.

The most significant factor in gaining acceptance was that of "visible changes"; where people saw for themselves the positive health impact of exclusive breastfeeding. Babies were described as "healthier" and "fatter" when given only breast milk in the first 6 months. The impact of seeing improved health outcomes was discussed by respondents across all strata and states and was the most prevalent theme throughout the discussions and interviews. This concept is discussed in greater depth in later sections on behaviour change.

Another noted strategy for increasing acceptance among the beneficiaries was the involvement of community leaders and elders. Respondents suggested that CVs should be encouraged to meet with community leaders and discuss the key messages and benefits of both exclusive

breastfeeding and complementary feeding, as support from these key individuals was perceived to improve acceptance throughout the community.

Importantly, messages that contained family planning advice were considered to be barriers to acceptance of the health messages and the IYCF programme more broadly. Male CVs and health workers both expressed reticence to link exclusive breastfeeding to family planning, saying that those messages were not accepted. This was confirmed by a father who suggested that interest in exclusive breastfeeding would be lost if it was promoted as a family planning technique.

Box 5.10: Illustrative quotes on acceptance

R: Toh, truly, the people have been supportive, they have said that they have never had any program as interesting as this one. R: Yes, they fully accept the program." IDI-63-KB (health sector official)

R1: Yes {there are barriers}, but if we keep going to them and repeating the message, they will listen eventually" FGD-24-KT (GM)

R1- well, we have to be patient {when women do not believe the IYCF messages}, because you see, when they receive strange information like this {do not feed infant water}, it will take time for them to accept it. But we have to be patient." FGD-34-KB (MCVs)

R1: Well, change is inevitable and you have to be a patient person {to encourage programme attendance} and enduring and also one who is able to close his ears to so many things because you will see a lot of wrong. Someone may think you want to cheat him but if you are patient, he will turn around and see the importance. Now what is expected of us is patience and endurance." FGD-38-KT (MCVs)

R:{The programme is accepted} Because we involve the midwives. Any time any program starts, we involve the traditional heads, town criers and so on to educate people on what is going on." IDI-61-KB (health sector official)

R: Family planning {is the message not accepted}." IDI-8-KT (HW)

"R: yes, well, honestly, the problem now is only one thing, when you arrange all the cards, the people you gave the first advice for follow up, for now it is family planning, because it is in the card, and honestly, we hide the cards, because if they need it, we do not open it to them." IDI-6-KT (HW)

5.4.2 Attendance of the IYCF programme

Attendance was a theme closely related to that of acceptance and to some degree acceptance of the programme can be gauged by attendance in the support groups. One sub-theme that highlighted the link between acceptance and attendance was that of "permission to attend" that must be granted from the husband before the woman can join the programme. For the husband to give permission for his wife to attend the programme, he must first accept the programme and the messages being given. Participants across all strata mentioned the need for women to get permission to attend the programme, whether at the health facility or in the community and that lack of permission from the husband could be a major barrier for programme attendance.

Box 5.11: Illustrative quotes on needing husband's permission to attend

R: sometimes there are women who want to attend but their husbands refuses, so that is a big problem." IDI-61-KB (health sector official)

R9: It is only the husband that can prevent you from coming." FGD-42-KB (mothers in programme)

R1: the reason may be our husbands, if you ask them and they stop you, you don't have any other choice. And if he allows you, you can go and listen to whatever news and be enlightened." FGD-49-KT (mothers in programme)

R4: {To motivate attendance} Always, always when they call upon the women, their husbands must be involved because the woman cannot go without her husband. So the men in charge of that should give more attention to sensitizing the men, so there will be relief and less problems. FGD-44-KB (mothers in programme)

"R5: I said for some it is the husband that doesn't allow it, that is it. Some allow for you to enter the program and another doesn't because you see this program is for the benefit of the woman and some don't want anything that will make the woman move forward, or discourage her saying she shouldn't agree with it." FGD-52-KB (mothers not in programme)

One strategy for increasing attendance that was mentioned by health sector officials, CVs and health workers is to provide refreshments at the support group meetings and/or to give little "gifts" to the women, such as soap. Many of the CVs felt that beneficiaries were disappointed to not receive any token for attending the meeting and as a minimum they should be provided with water and biscuits.

Of the mothers interviewed that were not currently participating in the IYCF programme, the main reason for not joining was simply that they had not heard of the programme. However, it was unclear from the interviews as to whether or not mothers ladled as "not in the programme" were in fact not in the programme, as many of them responded that they were in the programme and could accurately describe the IYCF health messages. This confusion could be the result of mothers having received these messages from ANC or hospital doctors.

Box 5.12: Illustrative quotes on increasing attendance

"R: The content is okay, the delivery I said we should include more communities, and then we should give a refreshment during meetings, even if it is water, during our support group meetings." IDI-68-KT (health sector official)

"R: Like this program of IYCF, firstly, just like the organizers of the program have been told that this is something meant to be free and not compulsory or to make profit. But still yet, the kind of meetings we hold with our people, they grumble that we did not serve them refreshment, so we discovered that there is a problem. In my own section, I started buying pure water and biscuits and sharing for them, anyone I invite, I give pure water and biscuit. And in a month, I do this three times, and then when we do this and I don't give anything, the next month, we will hardly get as many people as expected. But when we give it, the next time we have it, more people will come, if normally we have twenty people, then thirty will come." IDI-8-KT (HW)

"R1: there are challenges that we face especially when we are going to hold meetings with the groups, if some well to do people inform us that they would be at such meeting, we want to be assisted with any small amount that we would give to these people, some people tell us that when we invite them for these meetings we don't give them water and all that, that is just what I have to say." FGD-41-KT (MCVs)

R7: what we want is something to give the women so that there will be more attendance." FGD-28-KB (FCVs)

"R3: we've not heard, we've not heard, not to talk of joining, it is only when you hear you can enter it, we've not heard, where did you hear it? You did not hear it, you've not seen it then can you enter it." FGD-54-KT (mothers not in programme)

5.4.3 Motivating and supporting the Community Volunteers

In general, the CVs were motivated to carry out their duties because they could see the impact they were having on the communities in which they work. They felt the training they have received was adequate to enable them to carry out their duties and they all agreed that there was nothing they had been taught that they could not carry out. Although they felt that their duties as CVs did not interfere with their daily activities, one male CV indicated that this role would be difficult to commit to without a source of income.

Transportation issues were frequently mentioned by the CVs as one of the biggest challenges in carrying out their duties. They struggled at times with the travel distance to some communities,

although it was not always clear whether they were referring to communities they had been assigned to or if it was communities they wished to access in order to reach more beneficiaries. During the rainy season some roads were inaccessible and even in good weather they wanted financial assistance to take motorbikes and other local transportation to the meetings as they reported sometimes paying out of pocket for transport. Bicycles were also mentioned as a good alternative for reaching remote areas.

Financial incentives were discussed across all strata as a means of supporting and motivating the CVs to carry out their work. It was frequently suggested that CVs should be given money to cover their transportation needs so that they are not paying out of pocket to reach their assigned communities. Some health sector officials and programme beneficiaries, however, also felt that CVs should be given financial compensation for their time and efforts. This incentive would go beyond covering costs for carrying out the IYCF programme and would constitute a type of reward to motivate the CVs to continue working in the IYCF programme. The CVs interviewed frequently mentioned their desire for both types of financial incentives.

There was broad consensus among CVs that refresher training would be beneficial to keep them encouraged and informed, a point agreed upon by health workers and health sector officials. In both Katsina and Kebbi States CVs reported having received a three-day initial training but it was unclear if any refresher training had taken place. CVs seemed to perceive the monthly follow-up meetings with the health worker as a form of “training”.

Box 5.13: Illustrative quotes for supporting and motivating CVs

R: Like I said, our only challenge {associated with these training} is our transportation that is sup-, that we don’t have "vehicle" sometimes when we have outreach areas. We need bikes that we can be using to get into remote areas. R: but for these CVs we are advising, if it is possible, they should be given some "incentives" so that they can be more enthusiastic to work. This is our advice, because some persons want to join. IDI-71-KT (health sector official)

R11: For any voluntary group to be sustained {in the health centres}, they need the support of the organization they work for in terms of financing, mobility, necessary working equipments and advices to ease their work. With this they will be on top of their task and the program will be a success. FGD-11-KB (fathers)

R2: Only if we give them {CVs} our support/corporation as women {will it support their work}
R3: If women don’t come out to support their work there will be no achievement
R3: they can be enhanced with a provision of motorcycle, to make it easy for them to come because some of them do not have any means of transportation, like- but if they have a means of transport like a motorcycle, the work becomes easy. FGD-45-KB (mothers in programme)

R3: well what doesn’t go well is lack of money and then transport to convey us to places, truly there is difficulty, but still we are doing our best because we have committed ourselves to God to do it R3: Well, what should be done {to resolve this problem} is every month you should give us some kola so that we can be strong to do the work. FGD-33-KB (MCVs)

R3: the additional assistance that we need is like now that we are in the raining season some of the communities are not accessible and some of them are very far and we cannot walk there and now the condition is that there is no money, sometimes we don’t have money to take transport that would take us there except that we trek there and trek back to our destination. That is how we go about it, sometimes it rains, it is either we wait for when the rains stops or sometimes we are caught in the community in the rain. Sometime of the communities have rivers and then there is the distance to consider. FGD-29-KT (FCVs)

R: Well if possible, there should be more training for people, and get more people and teach them, and it may be that something new has come up, so you tell them. IDI-3-KB (HW)

5.4.4 Clarity of IYCF messages and materials

Exclusive breastfeeding messages and instructions were well understood by mothers, fathers and grandmothers that were interviewed and they reported receiving these messages through a number of channels, including at ANC. Many of the mothers "not in the IYCF programme" were also able to clearly articulate the advice on exclusive breastfeeding, information they could have received through other channels, such as ANC. The messages on complementary feeding were less clear, although most women were able to state that it involved feeding children good food and that it commenced after 6 months of age.

Several health sector officials suggested translating the counselling cards into local languages and dialects to improve the clarity of the messages during the counselling sessions.

Some participants mentioned the use of media, radio in particular, to spread the word about exclusive breastfeeding and complementary feeding (CF) to those unable to attend the meetings and to further reinforce the message for those who did attend the meetings. One health worker mentioned that radio would be able to reach many women who were not able to attend the meetings.

Box 5.14: Illustrative quotes about clarity of messages and materials

"R: that booklet, well if we can have it translated to the local language, I think it will curb…Like if we can have some in Hausa and some in Arabic and use local pictures." IDI-59-KB (health sector official)

"R: Just like I said, that the counselling card should also be translated, I think the translation is going on, but apart from that, I think every category of women is being captured on that IYCF message." IDI-58-KB (health sector official)

"R13: There should be different enlightenments programs based on exclusive breastfeeding on both television and radio, especially on radio since it is the common source of getting information and enlightening people in this locality. There should be discussions with those who tried it and witnessed the benefits so that others can follow." FGD-11-KB (fathers)

5.5 The barriers and facilitators to behaviour change for IYCF recommendations

5.5.1 Barriers to practicing Exclusive Breastfeeding

One of the biggest barriers to practicing exclusive breastfeeding is the belief that without water a baby will die. Women respondents stated, logically, that both children and adults need water to survive and therefore babies should need it. Some women expressed their reluctance to not give the baby water during very hot weather as they feel they will suffer and become ill.

In addition to this fundamental barrier was the fact that previous generations fed their babies water and perceived them to be healthy leading to disagreement from relatives about this new guidance from the IYCF programme. This was further compounded by the fact that women need to get permission from their husbands to practice exclusive breastfeeding meaning it is not just a matter of them accepting the health message but they must also be able to convince relatives and husbands.

Box 5.15: Illustrative quotes on barriers to practicing exclusive breastfeeding

"R5: Truly some women feel that they are inconveniencing their babies when they are told not to give them water for as long as six months they just think that their babies will contract a disease or something but we have not seen that" FGD-45-KB (mothers in programme)

"R1: We need help, in the areas of enlightening of fathers, because if you as a mother is interested, the male is not

interested, in some cases there is nothing you can do with him, even if you resolute not to give the baby water, you don't know he will carry the baby and give him water, because he does not agree with your principles, it's his own principles he believe." FGD-54-KT (mothers not in programme)

"R5: Changes that should be made is sensitizing parents and grandmothers, because most times even if the father accepts, the grandparent will say no, in our time this was not done, do you want to kill the child? Because as the woman, you are the care giver and are burdened with the responsibility of the child, since when the child is sick, you don't know what to do. So we want our husbands to be sensitized, and we are ready." FGD-52-KB (mothers not in programme)

"R4 Well, you know some people want something while others don't. But mostly the women complain that if they don't give the infants water to drink, the babies will die. Others who accept, will say until they see a child that has not been given water during the six months, they will not practice it." FGD-20-KB (GM)

"R17: The challenges are mostly faced by men because the way some wives confront their husbands on why they should deny their new babies water for six months feeling that is a great punishment. Mostly old women are the ones instigating some women, after you convince your wife to attend the enlightenment lectures and she becomes convince then her grandmother or an elderly woman from her relatives will spoil everything, or they will just come with a concoction and give the baby after starting exclusive breastfeeding already. So that is the major challenge." FGD-11-KB (fathers)

"And the man needs to be convinced before he agrees, because he can say he doesn't agree that the child should not be given water, but when you explain fully to him, because you as the mid wife takes the delivery and you have to explain to both the mid wife and the husband. He has to agree because even if a woman agrees, the man may say he doesn't agree, he took water and so should his child. So when they explain to him, the wife is strengthened since her husband agrees. But if the husband doesn't agree, she doesn't have a say." FGD-30-KT (FCVs)

5.5.2 Facilitators to practicing Exclusive Breastfeeding

A consistent theme throughout all the interviews was that of seeing *visible changes* to mother and child health because of the practice of exclusive breastfeeding. Witnessing the health benefits to mother and child strongly contributed to the acceptance of the IYCF program and had a profound impact on the uptake of exclusive breastfeeding. Convincing mothers and older relatives that current practices were having a negative impact on the health of their children was a challenge that CVs and health workers reported consistently. The most common reason stated by beneficiaries for accepting the exclusive breastfeeding recommendations was that they had seen the benefits, either second hand or by trying it themselves.

A key strategy for motivating mothers to practice exclusive breastfeeding, mentioned across all strata, was having real examples in the community of mothers with babies who had been breastfed exclusively for 6 months. Over and over it was said by mothers, fathers and grandmothers that when shown a baby who has been exclusively breastfed they can see that it works, that the baby is "fatter" and therefore healthier then the baby fed breast milk and water. Several of the CVs discussed having practiced exclusive breastfeeding in their own homes and, having seen the benefits, were able to promote the practice with confidence in their community. Several beneficiaries reported that even just seeing pictures comparing babies who had been exclusively breastfed versus those given water had an impact on their own breastfeeding practices.

Another motivating factor for breastfeeding immediately after giving birth, which was not the local practice due to a belief that the colostrum is bad for the child, is its effects on expulsion of the placenta. Across all strata, participants stated this as a health benefit and shared success stories of women with retained placenta's that came out once breastfeeding was initiated. This was yet another *visible* benefit of breastfeeding that confirmed the health benefits of the practice.

The CV's reported that delaying the return of menstruation was a motivating factor for recommending exclusive breastfeeding; however, this was only mentioned in the CV/HW strata

and, as mentioned previously, promoting family planning was perceived as a barrier to acceptance of the program.

Box 5.16: Illustrative quotes of facilitators of exclusive breastfeeding

"R3: There is improvement because we have seen the difference between the children that were giving water and the ones that are not giving water." FGD-47-KT (mothers in programme)

"R1: Well we have been sensitizing them, even if a mother is not persuaded, when she sees the child of another person, she will ask how it happened, and then she too will enlighten others, so we are grateful and we are happy." FGD-49-KT (mothers in programme)

"R4: Because I have seen the importance, like she explained that there are some that don't agree with giving breast milk for six months, but when they see another's child healthy, I have seen some who have said they must try it because they have seen the outcome from others." FGD-50-KB (mothers not in programme)

"R4: Because the people see the advantage of doing it from their neighbours that is why they accept it." FGD-17-KB (GM)

R8: It is the men and health workers {who influence a woman to exclusively breastfeed}. Chorus: Health workers. R5: Right from the time they start antenatal. FGD-21-KT (GM)

"R4: We discuss about how to convince household heads that don't accept the program, be it men or women, we will draw their attention because some of them don't understand what is happening until they see their neighbours that have done it and are healthy." FGD-33-KB (MCVs)

"R: they too explain themselves that; yesterday a woman gave birth and her placenta didn't come out and when the child was placed given to suck, the placenta fell, so you see all these are experiences they witness. They were told and they tried it and saw that it's true so you see they are more enlightened." IDI-62-KB (health sector official)

R: at the time she gives birth, and when the placenta doesn't come out, immediately the breastfeeds, the placenta comes out." IDI-12-KB (fathers)

5.5.3 Barriers to practicing Complementary Feeding

The most common barrier to practicing complementary feeding was the perceived availability and affordability of the recommended food items. However, there was disagreement on this issue as several beneficiaries reported that they were unable to afford many of the items and CVs reported that the items were accessible and affordable. Part of this discordance could be related to the list of items itself, as there appeared to be one large list that was used across all settings and communities. However, it might be that only a few items on the list were available in each community and the beneficiaries focused on what they are not able to access and afford, while the CVs were referring to the few items that were readily available and affordable.

A related issue was that many of the women did not have a source of income and therefore relied on the husband to provide money for food items. The women then needed to convince their husbands that buying potentially more expensive items were important and beneficial.

Box 5.17: Illustrative quotes on barriers to practicing complementary feeding

R: it is the complementary one that gives them a lot of problems, as our women here are the types that just stay at home with no jobs and no handworks, they simply rely on what their husbands give them, and like I told you earlier, it is the men that cause these problems." IDI-67-KT (health sector official)

R3: Well some of the women are asking where they will get the money to buy the eggs, meat that they will give their children. They should be considered." FGD-42-KB (mothers in programme)

R3: it depends on the financial status of the father, because the husbands sometimes cannot afford that." FGD-22-KT (GM)

R3: That is not difficult at all because all of us here have them, we have water melon, we have soy beans and we tell them to get soy beans and add it with groundnut and millet and ground it together, and fish and give the little children less that 24months old." FGD-25-KB (FCVs)

R1: Well, truly there is nothing difficult because all these things, we have them in abundance R1: like soy beans, egg, meat, averagely we have them here and so there is nothing that would be a problem carrying it out." FGD-33-KB (MCVs)

5.5.4 Facilitators to practicing Complementary Feeding

To address the primary barrier to practicing the complementary feeding recommendations one health worker suggested tailoring the counselling cards to the individual communities so that the list of recommended food items highlighted those items that were affordable and available to that specific community. Several health sector officials suggested offering food demonstrations at the group sessions to provide practical guidance on how to incorporate the recommended food items into everyday cooking. If locally available and affordable food items were used it could provide mothers with helpful knowledge of how to cook nutrient rich foods for their families; and they could observe whether or not their infants liked the new foods.

Many of the mothers stated that the health of their children was the primary motivating factor for changing the feeding practices of their children. This could be important when identifying strategies to increase the uptake of the complementary feeding behaviour change messages.

Box 5.18: Illustrative quotes on facilitators to practicing complementary feeding

"R: ok, the advice I would give is only on one thing. The card that we use, I understand that the way it was made, everyone would be able to use the card, you see for instance, our foods, like if you say those of Zaria and ours here in Katsina, you will see that there are differences,-R: what we need to do about the food is that, in the… where they put the kinds of food, pictures should be taken in order that people will know what a particular food looks like. Like for us here, they can put the picture of corn while for that of Zaria they can put the picture of yam because these two kinds of food add the same nutritional value and are peculiar to these places respectively. Or we can say for us here, the picture of soya bean should be included, you know it isn't hard for us to get soya beans here,-R: and it does so much for the body. So they will put those things that would not be difficult or too expensive for us to acquire, so each town should have a special card with their own specific food items. Like you see this indomie that people eat everywhere, someone that eats only maize/corn would think that one who eats indomie noodles eats a better kind of food, not knowing that they both are of the same nutritional value- R: so these are what should be included in those pictures, such that when a person picks it up he knows what to do and it would not cause him so much trouble to acquire." IDI-6-KT (HW)

R: Everything is going on well, the only challenge is that some of the food materials, because of "poverty" they complain to us that their husbands do not give them, but we show them that these foods are within their environment. IDI-71-KT (health sector official)

R: Yes { the messages should be given in a different way}, like in food demonstration, if we are talking about complementary feeding, maybe a particular day will be taken out for food demonstration, and they will see how it is being prepared, probably they will do same in their houses. IDI-58-KB (health sector official)

5.5.5 General strategies to increase uptake of health messages

Participants across all strata were asked if they preferred group discussions or one-to-one meetings for giving/receiving the health messages in the IYCF program. The CVs felt that group meetings were more effective than one-on-one sessions and yielded better results, whereas several health workers said they preferred the one-to-one sessions. The grandmothers perceived

group meetings to be better than one-to-one, because the peer support helped individuals understand the message; but among the mothers in the program the responses were mixed.

One female CV offered a potential explanation for the effectiveness of the group meetings by suggesting that women would be more likely to make the behaviour change if they could see others around them also agreeing to the advice. The advantages of one-to-one meetings mentioned by health workers and mothers were that people may be too shy to ask questions in a group session and that the message can be tailored or given special emphasis if given directly to one woman.

An emerging theme across the strata was that it takes time for the IYCF messages to be accepted and for behaviour to changes to occur. CVs and health workers said they needed patience in their work and they had to repeat the messages often to generate behaviour change. Fathers and grandmothers mentioned overcoming existing culture and many said that the messages needed to be repeated before they sink in. This provides some evidence to suggest that the IYCF support groups play an important role in eliciting behaviour change and that meeting regularly and reinforcing the messages could improve uptake of the exclusive breastfeeding and CF messages. The use of multiple behaviour change strategies was also indicated by the suggestions to include food demonstrations and the use of the mass media (see above).

Box 5.19: Illustrative quotes on group vs. one-to-one meetings

"*R4: the group training is better than the individual training, because what an individual do not understand then the other person will understand."* FGD-17-KB (GM)

"R1 – Well as for me gathering us is much better because when women are selected maybe in twos'. When the teacher ask you question or tells you something you will just agree to it even though you don't really understand but you see, when you are many, you can learn from what someone observes or ask." FGD-23-KT (GM)

"R: Well you know counselling depends, you know it is done in a group, it is a discussion where people will hear, but if it is one person at a time, it may be that as you are counselling, the person you are counselling is asking you questions, that also takes time. But if it is done for many people, not many will be able to ask questions because you see women are private and it is not everyone that will want to say some things in public." IDI-3-KB (HW)

"R1: the most effective is when you meet with people as a group and explain to them because when you do that in a group, even if someone doesn't understands, another will explain to him until they understand." FGD-33-KB (MCVs)

"R5: the meeting is better for us. The reason I said the meeting is best is because if a woman hears, she will join. But when you meet a woman in her room, she will not take your advice, but when she comes to a gathering and everyone hears and agrees, like now you have called us and we have all come, you see we can whisper amongst ourselves if this is genuine." FGD-28-KB (FCVs)

"R1: I want it done individually because in group some will not listen to some things being said because they will it's irrelevant to them cos people have in mind what they want to be sensitized about but when is done individually, you can seek their advice on what you want to know and they will explain it to you better." FGD-48-KT (mothers in programme)

"R2: I want it done in group because in the case where someone forgets another person will remind you of it because that person was also there and even if another person is not there you can explain to that person and will be well understood." FGD-48-KT (mothers in programme)

"R3: Truly the one on one is more effective, because as a group, someone is busy talking behind and doesn't pay attention to what will enlighten him so that he understands what is being taught. And you can tell someone but his mind is somewhere else so he will not take what you are saying." FGD-49-KT (mothers in programme)

5.5.6 Feeding practices are changing within communities

Grandmothers and mothers across both states expressed their opinion that feeding practices are starting to change within their communities. Previously, it was common practice to give babies water soon after birth and traditional drinks and “prayers” of boiled herbs. However, the perception was that these practices are starting to change as health messages spread throughout the community. Several participants interviewed felt the use of traditional medicine was on the decline in favour of medicine given by health workers at the hospital. A potential challenge, highlighted by a health worker from Kebbi, was that traditional birth attendants might feel their livelihood was threatened by these new messages and try to dissuade women from following the new advice.

Box 5.20: Illustrative quotes about changing practices

“R7: We normally give our children traditional medicine before normal medicine but we were told not to give them traditional medicine until they are 9 months old. Now that we know about the normal medicine from the hospital we have stopped using the traditional one. R6: we don’t even have any more traditional medicine, we only use medicine from the hospital.” FGD-42-KB (mothers in programme)

“R3: Well we now hardly use traditional medicine, we have refused to take it, when there is a problem, we go to the hospital. We are enlightened and know the importance of going to the hospital, when your child is not well and once you go to the hospital, the purging stops. R4: and another reason why we do this is because we understand that whenever we go to the hospital, the health workers advise us that traditional medicine adds more sickness to a child, and that is why we will not give it.” FGD-49-KT (mothers in programme)

R4: Now since this organization came, we don’t give traditional medicine (cross talks) R5: we have gone beyond that level R4: Now it is just breast milk I: What about other things like prayers? R5: that is given when you want to wean the child, (cross talk) it is given to prepare his heart.” FGD-24-KT (GM)

“R: Toh, truly up till now we still have very little challenges because those are our traditional barbers and birth attendants. They even began to "accuse" this thing because they felt that it has prevented them from getting things that would have earned them some food…R: Many will say if the child is not given water at birth he won't have a strong conscience. Toh we have been getting these "accusations" why, because they feel these things are trying to push them aside I: To push them aside R: But gradually as time went on, things have gotten better, am not saying they do not exist anymore, but it is fair. R: Even them, it is not like they do not understand, but because they feel it hinders their source of income.” IDI-2-KB (HW)

5.6 Recommendations to strengthen IYCF programme

5.6.1 What is working well in the IYCF programme

The general opinion across all strata was that the IYCF programme was having a positive impact on the health of infants and mothers in the communities where it was being carried out. Mothers, fathers and grandmothers reported that breastfeeding practices are changing in their communities and as the number of success stories increased the programme gained greater acceptance. A key strategy to the success of the programme seemed to be support from the husbands as they allowed the women to attend the meetings and ultimately agreed or disagreed with the recommendations of the IYCF program. The fathers interviewed, in this study, were all very supportive of the program and in turn permitted their wives to attend the meetings and follow the advice. Fathers in the sample mentioned discussing this programme together and at the houses of community leaders. They were vocal about the important role that they played in supporting women to follow the recommendations.

It was clear from the interviews that using local examples of babies who had thrived, while exclusively breastfeeding, was important to combating the prevailing theory that babies needed water or they would die. Furthermore, many beneficiaries and CVs stated examples where the babies not only lived but were fatter and healthier than their water-fed counterparts. *Seeing* this

benefit seemed to have the greatest impact on adopting exclusive breastfeeding practices. Despite some of the positive health benefits of exclusive breastfeeding mentioned by female CVs, family planning topics should be kept out of the content as it could reduce attendance and acceptance of the IYCF programme.

5.6.2 Recommendations to increase acceptance of programme & uptake of behaviour change messages

The overall perception of the IYCF programme across both states and all participant strata was that it was having a positive impact on the health of mothers and infants and that it should be continued and, if possible, expanded to other communities. However, several key recommendations were identified from the discussions and interviews with beneficiaries, staff and health sector officials. A major barrier identified to the uptake of exclusive breastfeeding related to the recommendation of not giving babies water until after 6 months. Although the participants interviewed now accepted the health message many said at first they did not agree with this point and furthermore, suggested that many women do not adhere to exclusive breastfeeding because of the fear the baby will die without water. Therefore, the IYCF health messages should emphasise that breast milk contains water and in sufficient amounts so that exclusively breast fed babies do not need additional water.

The second recommendation relates to complementary feeding practices based on the reports from many mothers, fathers and grandmothers that the food items being recommended were either too expensive or not available. This could be true for many of the items on the list, however CVs, health workers and some health sector officials suggested that there were definitely some items locally available and within reach financially for most of the community. Community-specific counselling cards could be developed, that highlight the available and affordable food items to promote during meetings and discussions.

Box 5.21: What will help strengthen the IYCF programme

1. Sensitising the fathers – *when the husbands support the program it is easier for the women to attend the group meetings and follow the behaviour change messages.*

2. Using real examples to illustrate health benefits of exclusive breastfeeding – *when beneficiaries can see actual babies who have been exclusively breastfed and have thrived, are fat and healthy, they are more likely to practice exclusive breastfeeding themselves.*

3. Tailored messages that address common barriers to behaviour change *– in particular include information about the water content of breast milk and make sure this point is highlighted during the one-to-one and group discussions*

4. Tailored messages that are context-specific – *in particular the use of counselling cards on complementary feeding include food items specific to the local community that are easily accessible and affordable*

5. Use a range of behaviour change techniques *that engage programme beneficiaries at multiple levels and reinforce messages, including skill development, problem solving, social support, knowledge and use of the media*

6. Keeping Family Planning topics out of the content – *although female CV's perceived this to be a positive impact of exclusive breastfeeding; many agreed that it would have a negative impact on overall attendance and acceptance of the programme.*

6 Discussion

In this study we collected, collated and synthesised the perceptions and experiences of providers, recipients and other stakeholders of the IYCF programme. We focused in particular on a number of priority areas of investigation as captured in the objectives of the study. The results presented are based upon the perceptions and experiences as reported by those interviewed and the interpretation of these by the research team, who coded, analysed and interpreted the data.

We noted when reviewing the findings from the piloting of the theme guides that the interviewers and group session facilitators had difficulty in finding a way to introduce or refer to the programme to their respondents. They often referred to IYCF as 'the exclusive breastfeeding programme' rather than say 'the infant and young child feeding programme'. This label had obvious disadvantages in leading the respondents to this particular element of the IYCF programme possibly to the exclusion of others. Attempts were made during the pilot feedback sessions to overcome this hurdle but amongst the study team no 'perfect' way was found to refer to IYCF in the *Hausa* language. Although imperfect, based upon the transcripts from the study, the interviewers and facilitators did much better at calling IYCF 'the programme for infant and young child feeding' in the study than in the pilot. However, there was a tendency sometimes to slip into talking about the exclusive breastfeeding programme amongst both interviewers and respondents. This may be a true reflection of the programme, as there has been a strong focus in practice on this element of IYCF, but should be taken into account when drawing conclusions on the findings from this study.

The majority of respondents were able to distinguish between IYCF and CMAM programmes, and report that IYCF was a means of preventing severe acute malnutrition and the need for CMAM, but for some respondents, the IYCF programme was synonymous with CMAM. Whilst every effort was made to untangle these programme labelling issues in the analysis and interpretation of the findings it is possible that there may have been some misinterpretations by the respondents during the interviews and the study team during the analysis.

6.1 Opinions and benefits of the IYCF programme

The IYCF programme was viewed positively by respondents based upon the perceived visibility of the health benefits, and consequent health care resource savings. Exclusively breastfed babies were observed from the personal experience of respondents as generally healthier with less episodes of diarrhoea than their counterparts/siblings who were not exclusively breastfed. This was the main focus of the positive opinions of the IYCF programme. Such visibility of an intervention's impact has been acknowledged as a factor which encourages the adoption of new innovations since the development of the diffusion of innovations framework in 1962 (Rogers, 1995). It is perhaps more common however for such visible health impacts to be associated with treatment programmes such as CMAM than with programmes focussing on preventative health messages. The programme could be reinforced and strengthened by focussing on the use of real examples of healthy children who have been fed according to IYCF recommendations at both health facility and community level as an aid to the increasing and consolidating acceptability of IYCF.

There were mixed opinions among those interviewed about preferences for the CV facilitated support group or individual counselling sessions. Support group counselling was the preference of grandmothers, CVs and some mothers interviewed because it increased confidence, reinforced attitudes and understanding and increased the spread of messages through peer-to-peer interactions; whereas individual counselling was the preference of other mothers and health workers interviewed because it addressed individual concerns. These perceptions concur with practices that have effectively been used in other countries; where group counselling is used to address common IYCF issues, and individual counselling is used to address rare concerns (Aboud

& Singla, 2012). Taken together these results suggest a combination of group and individual counselling might work well in the Northern Nigeria; perhaps with an initial emphasis on strengthening the group counselling component of the IYCF programme to increase awareness and social support for the general recommended IYCF practices.

6.2 The IYCF Programme and its Integration with other programmes

IYCF has two main structural components which are: 1) delivery of preventative nutrition and wider public health messages through health facilities integrated with existing programmes; and 2) delivery of the same messages through CVs at the community level where peer to peer group interaction is also facilitated. One important finding from this study, which is based on the perceptions of health services personnel, is that of the impact of IYCF on increasing attendance at ANC and for childhood immunisations. According to the recently published 2013 Nigeria Demographic and Health Survey (NDHS, 2013) the proportion of pregnant women who see any skilled provider for ANC is amongst the lowest in the world at 22.7% for Katsina and 24.3% for Kebbi. This compares to a mean of 78.3% of pregnant women attending ANC across 26 countries of sub-Saharan Africa between 2009 - 2011 (van Ejik et al, 2013). Coverage with childhood vaccinations is perhaps even more shocking with the proportion of children having received all basic vaccinations at 8.7% in Katsina and 2.8% in Kebbi.

There are several important issues to consider given the extremely low coverage of ANC and childhood immunisations and the perceived and potential impact of the IYCF programme on these. Firstly, in terms of the IYCF programme reaching as high a proportion of pregnant women and mothers as possible, the community component is clearly very important as access to routine preventative programmes in health facilities is low. Based on the responses of mothers involved in the IYCF programme in Kebbi State the community arm is working well, but this was not as evident from our results for mothers in Katsina State even though the CVs from Katsina State report that their activities in the community are happening as planned. It is important therefore to do further exploration of the status of community IYCF activities in Katsina State. The simplest way of doing this would be to review the monitoring records and then if required strengthen the IYCF community activities in Katsina State. Secondly, if IYCF truly does have the potential to increase coverage of ANC and/or childhood immunisations in these two States and other Northern Nigerian states then it is of major importance to the public health of the population.

In our previous study on Maternal, Neonatal and Child Health Week (MNCHW) we did not find that health service staff perceived the programme to increase coverage with ANC despite this being an aim of the programme (OR Research Team, 2014). There were several reasons why it may not have been successful but the level of interaction at the community level with the CVs of the IYCF programme compared with the town criers of the MNCHW programme may be a critical point amongst these. This important interaction together with the referrals between the health facilities and the CVs and *vice versa* provides a plausible mechanism for an increase in access to integrated preventative health messages.

Further, the perceived visible health impact of behaviour changes linked to the IYCF nutrition messages provide an incentive for women to attend sessions including the perhaps less visible impact of ANC and childhood immunisation messages. The delivery of insecticide treated mosquito nets through ANC and extended programmes on immunisation (EPI) has often been said, anecdotally, to increase attendance at ANC and EPI; but studies to show that this is the case are lacking. Such studies are not easy to design, particularly where an intervention is introduced at the national level, or where the withholding of an intervention from a population to assess differences in attendance would be unethical. However, where an intervention is introduced in a phased

approach, as is the case with IYCF, such a study would be possible, but should be carefully designed.

6.3 Strengthening Implementation of the IYCF Programme

Community-based CV-facilitated support groups are a core component of the IYCF programme. Based on data from those interviewed, it appears that even though they exist in some form, they were not well defined and it was unclear whether the same women were meeting regularly. Perhaps the multiple references to “community meetings” were in fact “support group” meetings but they were rarely referred to as such by either CVs or beneficiaries. These results suggest there is a need to either redefine the “support groups” or better label the meetings, to make them more visible within the communities, and a need to strengthen the organisation and structure of support groups to align more closely with those planned (i.e., regular meetings with the same group of women facilitated by the CV) before taking steps to expand the community-based component of the IYCF programme.

The success of the community-based component of the IYCF programme will also depend on the CVs’ skills and motivation. The constraints of time, transport and remuneration identified by CVs are similar to those identified in an IYCF programme in Bangladesh (Avula et al, 2013). As reported for the CMAM programme, the lack of, or low financial reward given to the IYCF CVs was perceived as a threat to the long-term success of the community-based IYCF programme; a concern that is not unique to the WINNN supported programmes. The use of incentives for volunteer health workers in low income settings has been a controversial topic for many years (Buykx et al, 2010; Perez et al, 2009). For long term programme sustainability, however, incentives likely will be needed to maintain CV motivation and commitment, and to avoid the disruption and costs of high CV attrition rates. Incentives, for CVs, used in other IYCF programmes include the provision of interest free loans to purchase health products for sale at a minor profit, performance-based monetary incentives, the distribution of branded rain coats, certificates of recognition and diploma level training after 2-years of service (Sanghvi et al, 2013b). Future research could be undertaken to help select and evaluate a mix of material or non-material incentives, for CVs in the WINNN IYCF programme, to strengthen its long term sustainability.

Two motivating factors that should be strengthened, within the IYCF programme, are supportive supervision and regular refresher training sessions. CVs expressed a desire for regular supportive supervision to increase their confidence and communication skills, improve the status of their work and enhance community confidence in the programme. Refresher training and supportive supervision were critical for successful programme scale-up in the Alive and Thrive IYCF programmes and the Management of Childhood Illness programme (Sanghvi et al, 2013b). Other important systems strengthening components identified, which might be relevant for the WINNN supported IYCF programme, include articulated roles and responsibilities, reasonable workloads, job aids, internal monitoring and evaluation, and community support (Sanghvi et al, 2013b). Political commitment, partnerships, advocacy, and IYCF champions are also key components for long-term IYCF programme success (Sanghvi et al, 2013b). This may need strengthening in the WINNN supported IYCF programme, based on results from the ORIE qualitative midline evaluation (Jones et al, 2015), which showed that the IYCF interventions has a low profile compared to the other nutrition interventions, and has not yet gained political support or public funding in the WINNN focal states.

6.4 The Behaviour Change Strategy

6.4.1 Behaviour Change Techniques

Effective behaviour change public health interventions in developing countries make use of techniques from at least four of six domains; namely informational, performance-based, problem-solving, social support, materials and media behaviour change techniques (Briscoe & Aboud, 2012). Behaviour change techniques being implemented in the WINNN IYCF programme fall within the informational, material and small media behaviour change technique domains, as evidenced by beneficiary knowledge of the recommended IYCF practices, and the positive comments about counselling cards (materials) and pictures of healthy children (small scale media). Targeting innovators, for behaviour change, may also contribute to programme success, because visible health benefits in children of early adopters and peer-to-peer interactions were perceived by respondents to have a strong influence on behaviour change in these Northern Nigerian communities. It was not evident, however, from our results whether counselling techniques were being used to the extent they were planned (FMOH, 2012a). Few strategies to overcome barriers of behaviour change were reported by programme beneficiaries, interactions with mothers were often described as giving advice or community mobilisation rather than as listening to mothers concerns, helping mothers decide what is best to do and strengthening their confidence to do it. The concept of counselling is new to many people in Nigeria (FMOH, 2012a), so it is not surprising that CVs may need further training and supportive supervision on the use of counselling techniques, especially in the initial phases of the IYCF programme, to reinforce their use.

Normative societal constraints are particularly powerful, in Northern Nigeria, where the autonomy and decision-making power of women is traditionally restricted. Across all strata interviewed, the influence of authoritative figures, such as fathers and grandmothers, on IYCF decisions, as well as the emotional support of peers were identified as important constraints and/or enablers for sustainable behaviour change, as has been reported in other countries (Affleck & Pelto, 2012). WINNN's plans to train CVs on voice and accountability and to hold awards ceremonies for mothers who exclusively breastfeed for 6 months will help influence these societal norms. Close monitoring and evaluation of this social support behaviour change will provide useful insights into whether they are sufficient for influencing IYCF decisions among household authoritative figures.

Channels through which to influence household authoritative figures identified by our respondents, include the mass media, especially the radio, for reinforcing messages and reaching out to the men; and eliciting direct support from the community leaders or emirs. They also recommended the use of food demonstrations to strengthen the confidence and skills of mothers in the recommended IYCF practices. These recommendations align closely with WINNN's strategic plans. For example, WINNN produces and distributes audio jingles on IYCF practices across the five WINNN states; is planning to produce an IYCF video to be shown at support group meetings and is developing guidelines and a recipe book for carrying out food demonstrations. Based on experiences in the Alive and Thrive Ethiopian IYCF programme it might also be worthwhile holding food demonstrations for men, as well as women; and to broadcast professionally designed radio messages tailored specifically for men (Sanghvi et al, 2013a).

6.4.2 Behaviour Change Messages

Strong and clear views were expressed on the messaging that was effective for both acceptance of the content and encouraging behaviour change, with the main ones being 1) keep IYCF messaging distinct and separate from family planning; 2) reassure mothers and other family members that a large proportion of breast milk is water and therefore exclusive breastfeeding does not mean that a child gets no water; and 3) focus on locally available, affordable foods for complementary feeding.

The need to separate IYCF messages from family planning is not surprising. Rumours of vaccination being linked to fertility control have created problems in the acceptance and uptake of immunisations in Northern Nigeria over the last few years. So, whilst there is a clear perception in women interviewed that menstruation is delayed whilst breastfeeding and therefore fertility reduced, this should not be the focus of any messaging, especially as this is not the actual IYCF message. Instead, the actual message is that any breastfeeding (partial or exclusive) reduces fertility (FMOH, 2012b); and almost all women, in these communities, breastfeed their children (Visram et al, 2014). The main threat to exclusive breastfeeding is feeding water to infants less than 6 months of age; and is driven by a fear that children will suffer and even die if they are not given water to drink. Those interviewed reported that patience and repeated messaging about the successful experiences of early adopters can overcome these strong normative pressures against exclusive breastfeeding. These experiences agree with those reported elsewhere (Avula et al, 2103) that IYCF more widely and exclusive breastfeeding specifically will be successfully promoted through a focus on healthy children, emphasising visible improvements in health; although health benefits alone are not sufficient to sustain improved IYCF practices if normative and environmental constraints exist, such as convenience, traditional practices or poor access/availability or affordability of recommended IYCF practices (Aboud and Singla, 2012). For complementary feeding, the CVs recommended promoting a small number of realistic changes based on locally available and affordable foods. This recommendation agrees with expert opinion that a small number of prioritised age-specific and doable actions is more effective to promote than a wide range of improved practices (Sanghvi et al, 2013a; Aboud & Singla, 2012). Repeated and harmonised messaging across all programmes in the primary health care system will also be essential to motivate behaviour change (Sanghvi et al, 2013a).

6.5 Recommendations for WINNN

1. **Strengthen the implementation of the community component of IYCF**: review monitoring records and assess the level to which CVs are carrying out sensitisation meetings, group meetings and home visits within the individual communities. The findings suggest that communities are experiencing varying degrees of engagement with CVs and therefore some communities may require additional CVs or improved supervision to ensure they are carrying out the programme activities.

2. **Material and/or non-material incentives for CVs:** developing and testing strategies to improve motivation among CVs to ensure the long term sustainability of the programme. Providing transportation allowance for them to reach remote areas or assigning realistic community boundaries that do not require transportation, which would also closely align with the original IYCF model of community-based delivery. Facilitating indirect mechanisms that would serve to improve livelihoods, the status of an IYCF CV, or reduce their opportunity costs should also be explored.

3. **Strategies for CV training and strengthen the system for supportive supervision**: the extent of supportive supervision varied between states; however, all CVs reported a desire for regular supervision and refresher training. Regular training reinforces the programmes' main messages and helps to strengthen the CV's skills for changing behaviour. It also encourages and motivates the CVs and gives them a sense of importance and status within the programme. Regular refresher training and supervision could be an important strategy to engage and motivate the CVs to carry out their duties. In particular, the development of training that strengthened their counselling skills is needed.

4. **Translate counselling cards into local languages and use pictures of readily available and affordable local foods:** Producing materials that are context specific will help encourage and support behaviour change because it will address the beneficiaries' concerns that the recommendations are unrealistic.

5. **Reduce the number of messages delivered:** the current number of messages delivered by the IYCF programme is 24. Prioritising the promotion of a small number of key messages that are context-specific and involve doable actions, rather than a broad range of improved practices, could improve the delivery of the messages as well as the uptake of the behaviour change practices promoted.

6. **Strengthen the use of examples of real healthy children who have been exclusively breastfed:** real life examples of health children who were exclusively breastfed were perceived to enhance message acceptability and behaviour change. The impact of seeing positive, visible changes in real life within their communities was often described by beneficiaries; and was considered a powerful strategy to help shift current beliefs that infants will die if they are not given water to drink in the first 6 months of life.

7. **Adopt multiple behaviour change techniques**: this includes community-led cooking demonstrations, using locally available food products, and professionally developed mass media messages, including messages tailored for men. Overall these results serve to support WINNN's draft IYCF strategy for 2015, which includes training CVs on voice and accountability; broadcasting IYCF jingles; creating IYCF behaviour change videos; and developing food demonstration protocols and recipe books.

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Annex A Theme Guides

In this annex, the theme guides for the focus groups (women, grandmothers, husbands and CVs) and in-depth interviews (State and LGA level DPHC, nutrition officers, health managers and frontline health workers) are presented below.

A.1 Focus Group Discussion themes/questions for women who had participated in the community-based IYCF programme

1. To determine women's opinions about the IYCF programme
2. What are the motivations to the EBF behaviour change promoted?
3. What are the barriers to the EBF behaviour change being promoted?
4. To understand the quality of the sessions for the community and individual counselling and the support group session provided by the CVs and HWs.
5. To identify ways in which to motivate or support women to patronize IYCF services
6. To identify ways to strengthen the IYCF programme to better meet women's needs

No.	Themes/Questions	Probes
Q_1	What is the IYCF programme?	• What do you understand by this program that is aimed to improve child nutrition from birth to two years?
Q_2	Can you describe to me how the IYCF programme works in your health facilities and about your experiences in the programme	• Last time when you went to the IYCF programme in the health facilities did you attend a group session or one-on-one counselling? Was this part of ANC or the immunisation programme? • What did you learn during the session? • What did you think about the teaching methods and materials used in the facility to teach you about improving child nutrition? What did you like? What do some women dislike about the way they are taught? • Comparing the one-on- one counselling or support groups – where do you learn the most about IYCF: why? • Is there any referral from facility IYCF sessions to join a community IYCF session? • What support is required from the fathers, husbands and men in the households to attend IYCF? From other members of the household or community? • What changes would you recommend to improve the IYCF services in the health facility? • What would you like to learn that is not currently being taught? • How can the performance of HWs who provide IYCF services be improved? • What could be done to motivate more women to join the IYCF programme?
Q_3	Can you describe to me how the IYCF programme works in your community and about your	• Have you received one-on-one counselling or group sessions in the IYCF programme with the CVs in your community? • Last time when you attended an IYCF session in your community

	experiences in the programme	what did you learn? • What did you think about the teaching methods and materials used by CVs in the community to teach you about improving infant nutrition? What did you like? What do some women dislike about the way they are taught by CVs? • How did you hear of the program in the community? • How were you selected into the IYCF programme that is held in the community? • After you were enrolled in the IYCF programme in the community? Where do you go for the sessions? How often did you attend the sessions? • What are the reason(s) you would miss attending IYCF sessions in the community? • What are the reason(s) you would stop attending IYCF sessions? • Comparing the one-on- one counselling of support groups – where do you learn the most about IYCF: why? • What support is needed to attend the IYCF sessions from other members of the household? From the community? • What changes would you recommend to improve the IYCF services provided in the community? • What would you like to learn that is not currently being taught in the community sessions? • How can the performance of CVs who provide IYCF services be improved? • What could be done to motivate more women to join the IYCF programme in your community?
Q_4	What is your opinion about exclusive breastfeeding?	• What is exclusive breastfeeding? • What are the common breastfeeding practices in your community within the first 6 months of life? • When did you introduce water to your most recent child? • When did you feed your most recent child food other than breast milk? • When did you feed your most recent child herbal drinks? What about other drinks (including prayer drinks)? • What differences are there, when feeding male and the female children, in the timing of introduction of water, herbal drinks, other drinks, and food other than breast milk? • Which exclusive breastfeeding recommendations promoted by the IYCF programme have you been able to follow? And why? • Which exclusive breastfeeding recommendations promoted by the IYCF programme have some women not been able to follow? Why could they not follow them? • What changes are needed to overcome these challenges preventing women from exclusive breastfeeding?

		• What or who influences women's ability to follow the exclusive breastfeeding recommendations promoted by the IYCF programme? • What support do women need to practice exclusive breastfeeding? Probe on cultural practices that influence or support the mother.
Q_4	What is your opinion about complementary feeding?	• What is complementary feeding? • What messages have you heard and from who? • What messages, if any, have you followed (Legumes, animal source foods, Fruits and vegetables, fats and oils)? Which ones and why? • What message have you not been able to follow (Legumes, animal source foods, Fruits and vegetables, fats and oils)? Why didn't you follow them? • What and who influences your ability to follow the messages about feeding your child? • Why is it important for women to follow good complementary practices? • What differences are there, in complementary feeding practices, for male and the female children? Why? • What support do women need to follow the complementary feeding recommendations? Probe on cultural practices that influence or support the mother.

A.2 Focus Group Discussion themes/questions for women who had not participated in the community-based IYCF programme

Objectives

1. To determine women's opinions about the IYCF programme
2. What are the motivations to the EBF behaviour change promoted?
3. What are the barriers to the EBF behaviour change being promoted?
4. To identify ways in which to motivate or support women to patronize IYCF services
5. To identify ways to strengthen the IYCF programme to better meet women's needs

	Questions	Probes
Q_1	What is your understanding about exclusive breastfeeding?	• What is exclusive breastfeeding? Where or from who have you heard about it? • What are the common breastfeeding practices in your community within the first 6 months of life? • When did you introduce water to your most recent child? • When did you feed your most recent child food other than breast milk? • When did you feed your most recent child herbal drinks? What about other drinks (including prayer drinks)? • What differences are there between the male and the female children in the timing of introduction of water, herbal drinks, other drinks, and food other than breast milk? • What is your opinion about the message that children under 6 months of age should not be fed any food, water, herbal drinks or other drinks (prayer drinks) i.e., exclusively breastfeeding? And why? • What or who would influence how you breastfeed your baby? And why? • What support do women need to practice exclusive breastfeeding? Probe on cultural practices that influence or support the mother.
Q_2	What is your understanding about complementary feeding?	• What is complementary feeding? • What messages, if any, have you heard about how you should feed your child from 6 months of age until 2 years of age (Legumes, animal source foods, Fruits and vegetables, fats and oils)? Where or from who have you heard about it? • Which of these messages have you been able to follow? And why? • Which of these messages have you not been able to follow? And why? • What influences your ability to follow messages about feeding your child? • Who influences your ability to follow messages about feeding your child?

		• Why is it important for women to follow good complementary practices? • What differences are there, in complementary feeding practices, for male and the female children? Why?
Q_3	What is your understanding of the IYCF programme?	• What is the IYCF programme? • What does the programme include? • What are the reasons you are not involved in the IYCF programme at the community level i.e., participating in support groups? And what would influence you to attend? • What is your overall opinion of the IYCF programme; and what changes would you recommend are made to it?

A.3 Focus Group Discussion themes/questions for fathers who had participated in the community-based IYCF programme

Objectives

1. To determine fathers opinions about the IYCF programme
2. To determine fathers opinions about the IYCF behaviour changes being promoted, especially exclusive breastfeeding
3. To determine the barriers to the behaviour changes being promoted from the perspectives of the fathers
4. To understand the quality of the sessions for the community group support session provided by the CVs and HWs.
5. To identify ways to strengthen the IYCF programme to better meet their needs and to motivate or support women to patronize IYCF services

	Questions	Probes
Q_1	What is the IYCF programme and what is the involvement of fathers in the programme?	• What do you understand by this program that is aimed to improve child nutrition from birth to two years? • How did you hear of the programme? • Who engages fathers about the programme? • Are there any opportunities for fathers to meet to discuss the programme? • What kinds of issues are discussed during such meetings? • Are there any other ways that fathers are involved in the programme?
Q_2	What is your opinion about IYCF programme?	• What do you think are the benefits of the programme? Why do you think so? • What aspects of the programme do some fathers dislike? • What are the things you think could be done better on the programme? Why do you say so? • How can the performance of CVs who provide IYCF services be improved?
Q_3	What is your understanding about exclusive breastfeeding?	• What is exclusive breastfeeding? • What are the common breastfeeding practices in your community within the first 6 months of life? • When should mothers first give water to their child? And why? • When should mothers first give food other than breast milk to their child? And why? • When should mothers first give herbal drinks? What about other drinks (including prayer drinks)? And why? • What differences are there, when feeding male and the female children, in the timing of introduction of water, herbal drinks, other drinks, and food other than breast milk? And why? • What or who influences women's ability to follow the exclusive

		breastfeeding recommendations promoted by the IYCF programme? How can the programme influence them? • Which exclusive breastfeeding recommendations should women not follow? Why? • What are the challenges for women to practice exclusive breastfeeding (i.e., not giving the baby any water)? Probe on beliefs, people or cultural practices that influence the mother. • How can challenges preventing women from practicing exclusive breastfeeding be overcome? • What additional information would you like to learn about exclusive breastfeeding?
Q_4	What is your understanding about complementary feeding?	• What is complementary feeding? • What messages should women put into practice, if any, (Legumes, animal source foods, Fruits and vegetables, fats and oils)? Which ones and why? Where or from who have you heard about it? • What messages should women not follow (Legumes, animal source foods, Fruits and vegetables, fats and oils)? Why shouldn't they follow them? • What or who influences women's ability to follow the messages about feeding a young child? • Why is it important for women to follow good complementary practices? • What differences are there, in complementary feeding practices, for male and the female children? Why? • What additional information would you like to learn about feeding young children?

A.4 Focus Group Discussion themes/questions for grandmothers and traditional birth attendants who had participated in the community-based IYCF programme

Objectives

1. To determine opinions of other beneficiaries (i.e., grandmothers and traditional birth attendants (TBA)) about the IYCF programme
2. To determine their opinions about the IYCF behaviour changes being promoted
3. To determine the barriers to the IYCF behaviour change being promoted from their perspectives
4. To understand the quality of sessions for the community group support session provided by the CVs
5. To identify ways to strengthen the IYCF programme to better meet their needs and to motivate or support women to patronize IYCF services

	Questions	Probes
Q_1	What is the IYCF programme?	• What do you understand by this program that is aimed to improve child nutrition from birth to two years? • What IYCF services are present in this community? • What are the opinions in the community about the IYCF programme? What they like? What they dislike? • How did you hear of the program? • *{How were you selected into the IYCF programme?* • *What happens when you enrolled in the IYCF programme in the community? Where do you go? How often? With whom?* • *What motivated/ influenced you to join the IYCF programme?* • *What challenges do you face when participating in the IYCF programme?* • *How can these challenges be addressed?}*
Q_2	Can you describe to me how the IYCF programme works in your community and about your experiences in the programme	• What tools are being used to teach you (or daughter/in-laws) about good IYCF practices? How do you feel about the way IYCF is being taught/discussed? Why? What did you like about the way it was taught? • What did you not like about the way it was taught? • In your opinion, where do women learn more – is it in one-on- one counselling or in support groups – why? • What do you think can be done to influence other people in the community to join the IYCF programme?
Q_3	What is your opinion about IYCF recommendations?	• What have you learned from the IYCF programme? • What are the benefits of what you have learned? • What IYCF support do you give your daughter/daughter-in-law/breastfeeding mothers? • How has the IYCF programme influenced you regarding the support you give your daughter/daughter-in-law/breastfeeding mothers? • What other support exists or is needed in the community or health facilities for improved IYCF?

		• What changes would you recommend on the way the information is delivered/taught? • How can the performance of CVs who provide IYCF services be improved?
Q_4	What is your opinion about exclusive breastfeeding?	• What is exclusive breastfeeding? • What are the common breastfeeding practices in your community within the first 6 months of life? • When should mothers first give water to their child? And why? • When should mothers first give food other than breast milk to their child? And why? • When should mothers first give herbal drinks? What about other drinks (including prayer drinks)? And why? • What differences are there, when feeding male and the female children, in the timing of introduction of water, herbal drinks, other drinks, and food other than breast milk? And why? • What or who influences women's ability to follow the exclusive breastfeeding recommendations promoted by the IYCF programme? How can the programme influence them? • Which exclusive breastfeeding recommendations should women <u>not</u> follow? Why? • What are the challenges for women to practice exclusive breastfeeding (i.e., not giving the baby any water)? Probe on beliefs, people or cultural practices that influence the mother. • How can challenges preventing women from practicing exclusive breastfeeding be overcome? • What additional information would you like to learn about exclusive breastfeeding?
Q_5	What is your opinion about complementary feeding?	• What is complementary feeding? • What messages should women put into practice, if any, (Legumes, animal source foods, Fruits and vegetables, fats and oils)? Which ones and why? Where or from who have you heard about it? • What messages should women not follow (Legumes, animal source foods, Fruits and vegetables, fats and oils)? Why shouldn't they follow them? • What or who influences women's ability to follow the messages about feeding a young child? • Why is it important for women to follow good complementary practices? • What differences are there, in complementary feeding practices, for male and the female children? Why? • What additional information would you like to learn about feeding young children?

A.5 Focus Group Discussion themes/questions for community volunteers (CVs) who were involved in the community-based IYCF programme

Objectives

1. To determine women's opinions about the IYCF programme
2. What are the motivations to the EBF behaviour change promoted?
3. What are the barriers to the EBF behaviour change being promoted?
4. To understand the quality of the sessions for the community and individual counselling and the support group session provided by the CVs and HWs.
5. To identify ways in which to motivate or support women to patronize IYCF services
6. To identify ways to strengthen the IYCF programme to better meet women's needs

	Questions	Probes
Q_1	What is the IYCF programme? Tell us about the work you do for the IYCF programme	• What do you understand by this program that is aimed to improve child nutrition from birth to two years? • Tell me what you do in the IYCF programme. Probe on what they do in the health facilities and communities. • What do you find interesting/ works well? • What do you find challenging? • What support do you receive in performing these activities? • What additional support do you think will enable you to better perform the IYCF activities?
Q_2	Could you tell us about IYCF sessions you have with women, men and grandmothers	• Which type of sessions do you have with women/men/grandmothers in the community? Probe on one-on-one or support group sessions or sessions with men. • What is a support group? Probe on what happens in a support group? • How do you select participants into the programme/ who are they? • Are the sessions ever mixed (males and females)? • How often do you hold these sessions in a month? Probe on the regularities of the meeting. • Are these sessions with the same group of people each time or usually different people? Probe for composition of each meeting.*** • Where do the sessions take place? • How many people are usually present per support group (SG) session/ or sessions with men? What usually happens when you have more than the required number of participants during a SG? • What is your experience of the use of the register for recording participants who attended the support group sessions/ sessions with men? Probe on the advantages/ disadvantages of the register. • Comparing the one-on- one counselling of support groups – which do you think works best: why? Probe on which is more frequent/common • Do you refer women who attend your sessions to the health facilities? Why do you refer them?

		• Are women referred from the health facilities to join your sessions? Why are they referred?
Q_3	What is your opinion about the topics/messages given and mode of delivery of the IYCF sessions? What works well and what are the challenges?	• What topics/messages do you focus on during the IYCF counselling sessions (individual or group)? Do these topics differ with each visit/session? • How do you decide which topics/messages to cover during an IYCF counselling session (individual or group)? • What are your opinions about the topics/messages i.e., what is important/realistic for mothers to put into practice? What is less important to cover? • How many sessions should an individual have before they complete the full IYCF counselling programme? • What teaching materials and methods are used to deliver the messages; what works well/does not work well?
Q_4	What is your understanding of exclusive breastfeeding?	• What is exclusive breastfeeding? • How important is it for women to exclusively breastfeed? • Which exclusive breastfeeding messages might some CVs not agree with? Why? • What are the challenges for women to practice exclusive breastfeeding? Probe on beliefs, people or cultural practices that influence the mother. • Suggest solutions to the challenges.
Q_5	What is your opinion about complementary feeding?	• What is complementary feeding? • How important is it for women to follow good complementary practices? • Which complementary feeding messages might some CVs not agree with? Why? • What changes are difficult to put into practice and why? (Legumes, animal source foods, Fruits and vegetables, fats and oils)
Q_6	What is your opinion about the training you received to run IYCF sessions?	• What training are you given? • How often do you get trained? • When last were you trained? • Is there anything you were trained to do that is impractical and why is it impractical? • What things does the CV position require you to do that you were not trained for? • What changes would you recommend to strengthen the training programme?
Q_7	What is your opinion about the supervision you receive?	• Who supervises your work, for IYCF, and what is your opinion about the supervision? • How does it work? • When you were last supervised? • What things does the CV position require you to do that you do not have sufficient guidance, supervision and support to do well? • What changes would you recommend to improve supervision in the IYCF

		programme?
Q_8	How well are you able to combine your role as CVs and your normal day to day activities?	• What do you see as its main challenges? • What are the things you do not find the time to do as a CV? • How manageable is your workload as a CV? • What aspects of your life are disrupted by your activities as a CV? • What do you think can be done to address these challenges? To help you improve your performance as a community volunteer?

A.6 In-depth Interview Guide for the Director of Primary Health Care (DPH), State Nutrition Officer and WINNN IYCF advisor at the State level

Objectives

1. To understand opinions of health sector officials about the IYCF programme
2. To understand how the IYCF programme is implemented, managed and how well integrated it is in routine health services
3. To understand the long term commitment of health sector officials and community leaders to the IYCF programme and how to strengthen it
4. To hear their recommendations on how to strengthen the IYCF programme
5. To hear their opinions about how to motivate and support women to improve infant and young child feeding practices, especially exclusive breastfeeding (EBF)

	Questions	Probes
Q_1	What is the IYCF programme?	• What is your understanding of the IYCF programme? • What is the difference between IYCF and other similar health programmes? (For example CMAM, ANC, Child welfare clinics). • How does IYCF programme link with other health programmes CMAM, ANC, and Immunization? • What has changed since the introduction of the IYCF programme from what used to happen in ANC? • What is the role of the reproductive health programme in the IYCF programme? • What is the role of the immunization programme in the IYCF programme? • How important is the IYCF programme compared with other programmes in your LGA/State? And why?
Q_2	Can you describe to me how the IYCF programme works in your *{state/LGA}? (roles and processes)*. What works well and what are the challenges?	• How is the IYCF programme being carried out in your *{state/LGA}?* • Probe on types of sessions at the facility level, how they are run and who attends them and the referral mechanisms. • Probe on types of sessions at the community level, how they are run and who attends them and the referral mechanisms • How wide is the coverage area of the IYCF services in your *{state/LGA}?* • How well do you think the programme is working at the facility level? What works well? Challenges? • What are the general opinions of community members about the IYCF programme? • How well do you think the programme is working at the community level? What works well? • What are the challenges /barriers to its successful implementation? • How can these implementation challenges be addressed to strengthen the programme?

Q_3	What is your opinion about the training that is done for the WINNN IYCF programme?	• What type of training is being done for the HWs and CVs so they can implement the WINNN IYCF programme? How often is refresher training done for the HWs or CVs? • What works well in the training done? • What are the challenges for the training being done? • What changes would you recommend are made to the type of training that is being done?
Q_4	What is your role in the IYCF programme?	• What is your role in the IYCF programme? • To what extent do you feel the IYCF programme is one of your core responsibilities? Why do you feel this way?
Q_5	How does implementation of the IYCF programme affect the other roles and responsibilities of health workers in the health facility, and community volunteers in the community *(integration and support needed)?*	• How well is the IYCF programme integrated into the primary health system at the health facility level and the community level? Probe on the benefits to their work. Probe on the disruptions to their work. • How can the performance / motivation of community volunteers and health workers be improved to strengthen the programme? • What changes need to be made to make IYCF fit better into the health system?
Q_6	What is your opinion about the content and delivery of the IYCF sessions *(Process, content and delivery)?* What works well and what are the challenges?	• What is the content of the IYCF counselling sessions? • Why are these messages being promoted? • What materials and methods are used to deliver the messages; what works well/does not work well? • What is important/realistic for mothers to put into practice? • What is challenging for mothers to put into practice?
Q_7	What changes, if any, are needed in the content, delivery or audiences targeted in the IYCF programme to motivate and support women to improve infant and young child feeding practices?	• What changes to the content are needed to lead to improvements in IYCF practices? Probe on exclusive breastfeeding • Should IYCF recommendations be delivered in a different way? Probe on behaviour change that focuses on breastfeeding practices, especially exclusive breastfeeding • What changes are needed to overcome challenges preventing women from following the recommended IYCF practices? Probe on exclusive breastfeeding
Q_7	What is your understanding of exclusive breastfeeding and complementary feeding?	• What messages do some health workers disbelieve? And why do they disbelieve them? • What changes, if any, would you recommend to the information being given to women? And why would you recommend those changes?

A.7 In-depth Interview Guide for the State Health Education Officer and State Reproductive Health Officers

Objectives

1. To get the understanding of health sector officials about the IYCF programme
2. To understand how the IYCF programme is implemented, managed and how well integrated it is in routine health services
3. To get the opinions of health sector officials about the IYCF programme and its mode of delivery.
4. To understand their roles in the IYCF and if the roles should be changed

	Questions	Probes
Q_1	What is the IYCF programme?	• What is your understanding of the IYCF programme? • What is the difference between IYCF and other similar health programmes? (For example CMAM, ANC, Child welfare clinics). • How does IYCF programme link with other health programmes CMAM, ANC, and Immunization? • What has changed since the introduction of the IYCF programme from what used to happen in ANC? • What is the role of the reproductive health programme in the IYCF programme? • What is the role of the immunization programme in the IYCF programme? • What works well when integrating the IYCF programme within other health programmes ? What does not work well? • How can challenges be addressed to strengthen this programme?
Q_2	What is your opinion about the IYCF programme and how it works in your *{state/LGA}? (roles and processes)*. What works well and what are the challenges?	• How is the IYCF programme being carried out in your *{state/LGA}?* Probe on types of sessions at the facility level, how they are run and who attends them and the referral mechanisms. • What is your opinion on types of sessions at the community level and how they are run • What is your opinion about the teaching materials and methods are used to deliver the messages; what works well/does not work well? • What is your opinion about the process used to train the health workers and community volunteers in the IYCF programme? Would you recommend any changes?
Q_3	What is your role in the IYCF programme?	• What is your role in the IYCF programme? • What do you feel your role should be in the IYCF programme? • Why do you feel this way?

A.8 In-depth Interview Guide for the Health Workers (HWs) involved in the IYCF programme

Objectives

1. To understand opinions of HWs about the IYCF programme
2. To understand the roles of HWs in the IYCF programme, how the IYCF programme is implemented and how to strengthen its implementation and integration into the routine health services
3. To understand the long term commitment of HWs to the IYCF programme and how to strengthen their motivation
4. To identify the types of support and guidance given to HWs in the IYCF programme and how to strengthen it
5. To hear their opinions about how to motivate and support women to improve infant and young child feeding practices, especially exclusive breastfeeding (EBF)

	Questions	Probes
Q_1	What is the IYCF programme and what are your opinions about it?	• What is your understanding of the IYCF programme? • What is the difference between IYCF and other similar health programmes? (For example CMAM, ANC, Child welfare clinics). • How does IYCF programme link with other health programmes CMAM, ANC, and Immunization? • What has changed since the introduction of the IYCF programme from what used to happen in ANC? • What is the role of the reproductive health programme in the IYCF programme? • What is the role of the immunization programme in the IYCF programme? • What else does the IYCF programme contain or include?
Q_2	Can you describe to me how the IYCF programme works *(roles and processes)*. What works well and what are the challenges?	• Tell me what you do in the IYCF programme. Probe on what they do in the health facilities and communities. • Probe on types of sessions (one-on-one or group) at the facility level, how they are run, who attends them, do they attend them regularly. • How many sessions should an individual have for them to complete full IYCF counselling at the facility level? • Probe on types of sessions at the community level, how they are run, who attends them and is there a regular group attending • How many sessions should an individual have for them to complete full IYCF counselling at the community level? • What is the role of the CVs? How can the performance of community volunteers be improved? • What is your involvement, if any, in the IYCF programme at the community level? Probe on supervision and training. • What is the referral mechanism in place for IYCF beneficiaries from the community to health facilities? • What is the referral mechanism in place for IYCF beneficiaries from the health facilities to the community? • What works well in the implementation of IYCF in your facility and why? • What are the challenges you face when implementing the IYCF

		programme and why? • How can these implementation challenges be addressed to strengthen the programme? What changes are needed?
Q_3	How does implementing the IYCF programme affect your other roles and responsibilities in the health facility, or as a health worker?	• Do you consider the IYCF programme as one of your primary responsibilities, like other services you provide? Why or why not? • What positive benefits do you think the IYCF programme has for your work? • What disruptions does the IYCF programme present to your work? Why? • What IYCF duties take up the most time? What IYCF duties do you not find time to do? • What changes are needed to make IYCF fit better with your other duties?
Q_4	How do you feel about the training, support and supervision you receive for the IYCF programme?	• How have you been trained for the IYCF programme? Probe – by whom? Where? How long ago were last trained? • What roles in the IYCF programme do you feel you need more training? • How is your IYCF work supervised? Probe – by whom? How often? What do you feel about the supervision? • What changes would you recommend to strengthen training, support and supervision?
Q_5	Can you describe to me the messages /topics and the mode of delivery used for the IYCF sessions held at <u>your facility</u>? What works well and what are the challenges?	• What topics/messages do you focus on <u>in the</u> facility during the IYCF counselling sessions (individual or group)? Do these topics differ with each visit/session? • How do you decide which topics/messages to cover during an IYCF counselling session <u>in the facility</u> (individual or group)? • What teaching materials and methods are used to deliver the IYCF information? • What delivery methods work well and why? • What delivery methods do not work well and why? • Should IYCF information be delivered in a different way? What changes are needed?
Q_6	What is your understanding of exclusive breastfeeding?	• What is exclusive breastfeeding? • How important is it for women to exclusively breastfeed? • What messages do some health workers disbelieve? And why do they disbelieve them? • What changes, if any, would you recommend to the information being given to women? And why would you recommend those changes?
Q_7	What is your opinion about complementary feeding?	• What is complementary feeding? • How important is it for women to follow good complementary practices? • What messages do some health workers disbelieve (Legumes, animal source foods, Fruits and vegetables, fats and oils)? And why do they disbelieve them? • What changes, if any, would you recommend to the information being

		given to women (Legumes, animal source foods, Fruits and vegetables, fats and oils)? And why would you recommend those changes?

Annex B Matrix of quotes under the sub-themes and themes

OBJECTIVE ONE: To understand how the IYCF program is implemented in Kebbi & Katsina States			
Themes	**Sub-themes**	**Quotes (KB= Kebbi, KT=Katsina)**	**Urban/ Rural/ N/A**
Opinions of IYCF programme			
	Training is adequate for CVs and messages are accepted by the HW/CV's	*"I: what is your opinion about the trainings you receive on carrying out the program? R1: Well our opinion is; we are happy with the program because we have seen improvement in our community and because formerly we used to have a lot of problems with our children, but as a result of this training, we also go round to sensitize people in town, truly we have made progress." FGD-33-KB (MCVs)* *"I: What messages on this program do you think you as CVs don't agree with? R2: Truly we agree with the messages given because they will not give us anything that will harm us, they will only give us what will help us and our children, we are grateful." FGD-31-KT (FCVs)* *"I: So like I said what messages on this program do health workers not agree with, for example eating soya beans, groundnut and other foods from animal source like meat, egg or meat or fruits and vegetables alongside carbohydrates R: Toh, health workers do not have anything against this." IDI-2-KB (HW)*	U U R
	IYCF programme should be expanded	*"R: what we want is for you to expand it, it is from you we were encouraged to strengthen it." IDI-12-KB (father)* *"I: so what is the opinion of people in town regarding this IYCF program? R: Truly it has been accepted very much, because formerly where they refused it (mentions name of town) but now they have accepted it. I: So do you think this program is going on well in our towns? R: Wherever they go, all the towns the women go to for this work, truly it is accepted, but there is need for expansion." IDI-61-KB (health sector official)* *"R: The content is okay, the delivery I said we should include more communities..." IDI-68-KT (health sector official)*	R N/A N/A
	IYCF programme is accepted by community & acceptance is linked to the perceived benefits of the programme	*"R: Their opinion is good, seriously it is good. They don't have any negative opinion; they even say please where did you people get this type of thing from, who taught you how to do it? Which magic are you people using that people are listening to you? They don't have any negative opinion about it, they are happy. They are happy, like a community we stopped going to, we stopped going because of security challenge, they are begging us to please come back. So I have not heard or experienced any negative opinion." IDI-68-KT (health sector official)* *"R2: Firstly, the obstacles we faced was at the beginning when it wasn't clear and so people were sceptical but later, some accepted it especially when they saw the achievements, then they followed." FGD-33-KB (MCVs)* *"I: What is your opinion about the IYCF programme? R4: This program? We understand this program very much that it helps a lot towards the health of our children because ever since they brought this program, we have tried it and have seen that we are satisfied and have seen changes with our children." FGD-18-KB (grandmothers)* *"I: Sir, what is your opinion on this program? R1: in our lives, we have seen improvement and this has encouraged us, and we thank the government and organizers of this program." FGD-9-KB (fathers)* *"I: So which of them is going on well and which if facing some problems? R: Well truly*	N/A U R U

		the exclusive breastfeeding is more challenging, because even when you explain to someone he doesn't understand but there is improvement now because some have tried it and it has worked, they have seen the difference." IDI-4-KB (HW)	R
		"…You know actually that in most cases where people have issues, it is in the lack of understanding that causes it. Because there was this village we went to for the first time, they were telling us that honestly they (smiling) cannot do without giving their babies water, that one will be taking upon himself curses, we then told them that, well the woman, they did a little prescription for her, yet she rejected it a bit but we got lucky when one servant of Allah in their neighbourhood was delivered of her baby and she came here for health education and she took our advice and tested it, her son became a wonder and a spectacle to behold, then the other woman came herself and told us that she would now on her own take our advice (smiling) and that was how it became accepted there. But initially there were problems, the problems were as a result of lack of understanding, and you see, you have to be patient with these kinds of issues." IDI-5-KT (HW)	U
		"I: Okay, so how did this program attract you such that you were able to allow your children and nursing mothers to go on exclusive breastfeeding and not breast milk and water? R4: truly we have seen the importance of it that is why we are supportive of the continuity of this program because we have tested and seen the result and so whenever such comes up, immediately we send our wives to be part of what is going on and corporate." FGD-14-KT (fathers)	R
		"I: What should be done to encourage mothers enrol for this program? R1: Well we have been sensitizing them, even if a mother is not persuaded, when she sees the child of another person, she will ask how it happened, and then she too will enlighten others, so we are grateful and we are happy." FGD-49-KT (mothers in programme)	R
		"I: How does this program attract you? R2: Benefits, because we have tried it and it is good that is why we keep doing it. And we talk to them about the benefits. R4: Because the people see the advantage of doing it from their neighbours, that is why they accept it." FGD-17-KB (grandmothers)	U
Benefits of the IYCF programme			
	Improved health of infants	*"R4: we understand that when you don't give your child water, they are more healthy and strong, he doesn't vomit or stool because he is healthy. R7: What we understand is; truly the newborns now are different from those before, they are more healthy and this is because of this program that was introduced on exclusive breastfeeding and we are satisfied with it and there is no challenge, the child is always strong and playing, when you see a child that is six months old, he looks like a child of one year. And so, we are happy and grateful for what we have got." FGD-25-KB (FCVs)*	U
		"R7: the program is good because our children do not fall sick frequently most especially diarrhoea, and if you see the benefit then is good for others too to practice it." FGD-47-KT (mothers in the program)	R
		"R5: formerly when you say you will stop water, we felt it was not possible but now we have seen that it is better for us than before. We see our children healthy and strong and because of that, we are emphasizing to our children to stop giving water, and the entire community and they too want relief so we are grateful, and may God continue to enlighten us. R6: we have seen the importance of it because it was six months before I started giving my child water and I have seen the difference amongst the children I bore. R7: the importance is that you give the child breast milk when you give birth to him, it brings mother and child closer and it prevents the child from common ailments like stomach pain, loss of blood, it brings healing, that is why we enlighten people to do more of this." FGD-30-KT (FCVs)	R
		"R2: it is important because my daughter in-law is practicing the program. There is one of my grandson and if you see him you will think that he is up to 1 years but he is just three months, and he is very healthy. R1: in my house no one practice that but I saw the benefit from my neighbour, because she is doing it and I am seeing the	R

		benefit and the boy is healthy without frequent illness." FGD-22-KT (grandmothers) *"R1: Salamu alaikum, the benefits we get is first it reduces infant mortality, the prevalent illnesses that infants suffer because when they are given, giving pap, water to a child who is less than 6 months, it makes the child to suffer diarrhoea and vomiting, the mother is burdened, the father is burdened. He continues to suffer this ailment to the extent that he develops the disease called tamuwa. If he is exclusively breastfed with all the nutrients in the breast milk boosting his immunity in a manner that he will not contact little illnesses, salamu alaikum." FGD-13-KT (fathers)*	U
	Improved health of mothers	*"Every mother wants the placenta to follow as soon as possible because it is a very great concern if it doesn't follow and then the loss of blood, every woman knows that if she losses blood after delivery or before delivery it is a big concern and then that intense stomach pain that causes a lot of harm to lives because it is more intense than labour pains. It takes one's mind and if someone came to congratulate you for the delivery you may not even know who it is so if a baby sucks the breast before that thirty minutes by Allah's mercy the problems would have been reduced and if Allah gives you luck you would not even have them at all during delivery." IDI-7-KT (HW)* *See more quotes in "visible changes-placenta removal"*	U
	Reduced healthcare related costs	*"R5: And it saves them buying medicine and washing clothes from stooling, and so when she breastfeeds, he is healthy." FGD-9-KB (fathers)* *"R3: for me since I have been following this programme accordingly, I have not gone to the hospital that my baby is sick. R6: because of this programme you will see you baby looking real good and healthy which others always like to carry your baby because of the good looks and good health condition." FGD-48-KT (mothers in the program)* *"R6: Additional explanation on this is; there are people who bring their children to this hospital and spend a lot of money to get health for their children, but as a result of brining this program to this (mentions town), people come from far and near and they come back to testify that they are happy that their children are healthy and can move around." FGD-40-KT (MCVs)*	U U U
	Natural family planning method (EBF)	*"I: what benefit do women get from this program of exclusive breast feeding? R5: peace be to you… the benefit, it hinders getting pregnant on time. Exclusive breast feeding stops one from getting pregnant before the babies are ready to be weaned and that menstrual flow doesn't come early as long as you breast feed, previously you would have menstrual flow after forty days and sometimes it extends to one year… like the woman I told you about her daughter is more than a year old but she just began menstruating like two months ago." FGD-29-KT (FCVs)* *"And then apart from that, this kind of trouble of getting pregnant when the time is not yet right, if a woman feeds her infant breast milk exclusively without water, she would not get pregnant." FGD-34-KB (MCVs)* *"I: What kind of benefit do women get when they observe improved infant and young child feeding practices? R7: Every kind of benefit they get and the child is well, he is healthy, so you see she has benefited. R1: because of the times we are in, family is much, the mother on exclusive breast feeding doesn't have to plan, she doesn't easily take in and some take longer than six months and not see their period. But now I know of mothers whose children are on the verge of walking and they still haven't seen their period and they have not gone for family planning. R5: those that have tried this have seen the importance, the children are sharper in school and they are healthy, we are happy and they are grateful." FGD-25-KB (FCVs)*	U R U

	Perceived increase in ANC and immunization attendance	*"I: Uhm. Toh what benefit does the immunization program get from the IYCF program R: Alhamdulillahi, Toh the immunization program truly also got support because truly before this program, associations were formed, the people were being followed to be given drugs, and they did not understand it. But this program as it were, women and men were recruited who go from house to house, they have their little books with pictures where they explain to people until gradually they began to understand the message and now when you go to the houses for immunization you don't hear that there was no"compliance" everyone accepted it insha Allahu." IDI-2-KB (HW)* *"I: So when they go into town, in your capacity, what kind of support do you give in ensuring this program is carried out in your towns in terms of supervision? R: Truly we supervise and when we meet some like some household heads, when we discuss they tell us that they have tried it and seen that it is very good. I: so what ways can be followed to ensure that those that are taught come to the hospital? R: the household heads? I: Yes R: Yes it is the older ones I told you about, and I told you earlier that they are not used to going to the hospital, but because the CVs go to their homes and talk to the regularly, there is progress, because now you will see the ANC is full, formerly in a month you will find only one woman come for ANC. Or three that are enlightened, but now any with any slight problem, they find their way to the hospital to check, the moment a woman is pregnant, you will see her go to the hospital because the CVs are working hard, even at celebration centres they sensitize and there are some books given to them with pictures and they show the women on what to do." IDI-1-KB (HW)* *"I: So is there any difference between this IYCF program and this immunization, the ANC and CMAM? R: There is not much problem because they are working hand in hand, yes they are working hand in hand, because in IYCF, we tell the pregnant women to eat more, and when they come for ANC, we still tell them to eat more, and if they are sick, let them come to the clinic. And in immunization, we used to tell them that it is not when a child is sick that you bring him for immunization, because immunization is for healthy children. So in IYCF, still we used to tell them, because immunizations not something that when somebody is sick, or ANC when somebody is sick – No, they should always come.* *R: On immunization days, because we don't have too much people on immunization days, so the few we get, we tell them because they don't come in group, it is only the few ones that come, but we are trying out best so that they will know the importance of immunization during this IYCF." IDI-3-KB (HW)* *"R: okay the changes is the increase in the number of women that attend the ante natal clinic because each one has heard about what IYCF does from pregnancy, and they want t to try it, some have tried and seen the benefit " IDI-66-KT (health sector official)*	R U U N/A
Implementation of IYCF programme			
	Health worker role is to supervise CV's	*"I: So that is in the community. So what is your IYCF role you have in the facility? R: IYCF I have in the health facility, if there is any problem, if they find any problem I the community, they will come to the facility so that I will see the problem, if I can solve the problem, I solve it, If I cannot solve, I will refer to general hospital." IDI-3-KB (HW)* *"I: It is fair. Toh, can you tell me the role you people in the hospital play in the IYCF program and in the communities you are serving R: What we do is this, like the "support groups" that have representatives from different villages; I hold weekly meetings with them to know what challenges they are facing in carrying out their duties. I am here and I know the challenges they are facing." IDI-2-KB (HW)*	U R
	CV's carry out community sensitisation	*"I: this work you do on exclusive breastfeeding, as CVs Chorus: We do it R6: We do it weekly, we visit those who are pregnant and sensitive them when they give birth, we may not be close by when they give birth or it may coincide with when we get there, like now there is this woman outside, I came with here, I paid here a visit and noticed that she had given birth a night before but the placenta wasn't out and they were preparing to go to the hospital, so I advised them to give the baby milk, immediately the baby was given, the placenta came out. Now she is outside R6: I also advised her*	U

		to go for immunization, she has taken two, remaining one R7: after the injection of BCJ, they are advised to wash the older children's hands before they eat and when a child goes to toilet or play, you ensure his hands should be washed before he eats. R3: we are sensitizing people. Some come regularly for antenatal and we educate them. R6: we look for them weekly and when it is time for delivery, we visit and tell them to give only breast milk so that he is healthy, he is healthy when he is given only breastmilk. So I keep advising them to give breast milk, it is healthier." FGD-25-KB (FCVs) *"I: Okay, how about in your hospitals, what do you do as FCVs? R5: What we do is; like when pregnant women come for antenatal or nursing mothers bring their children, we educate them on all these things and then we hold meetings, sometimes in a month we hold it twice, and other times thrice, every week." FGD-27-KB (FCVs)* *"I: Now, how do you carry out this program to mothers? R1: for the mothers, we go house to house to tell them, we fully explain to the nursing mothers and pregnant women what to eat before and after birth and she mustn't give the child water until after six months. And when she gives birth and the placenta doesn't come out, they cut the umbilical cord and breastfeed the newborn and it will fall out. R4: and then when we go out, we plead with them that there is a time of rest God willing, they should be patient, just as you are taking the trouble to take the children while your husband gives you money or he doesn't maybe, but as a mother do whatever you can to go there. We advise them because one day others will come here also." FGD-32-KT (FCVs)* *"I: Are there support groups or women groups that support this program always? R: Definitely, there are. I: What is the role of the CVs on this program? R: the role of CVs on this program; firstly they go into homes, the go house by house and sensitize women on hygiene general practices, for her family and the child, they advise them to wash the child's hands when he comes out from playing, goes to toilet, with soap or ash." IDI-8-KT (HW)* *"I: Toh, can you explain how the IYCF program is carried out? Meaning exclusive feeding in hospitals and how much you know about this program? R5: We-we come to our houses and they immunize our children. I: you want to talk right? R6: These workers come to our house (* houses) even with books for breast feeding, diet for babies and mothers a worker came to my house and shows me all how to cook the diet, she asked me " can you do it yourself?" I told her "Yes I can do it" she said "Okay continue breast feeding your baby without giving him water" she showed me in the books they were given and I have been practicing it and see my child, he up till now, we are fine. See it's a year and eight months and up till now he is healthy. All these people (Health workers) they are still around, they teach us constantly how to go about things and if we feel our child (* children) is not well we go to the facility and ask, and say how we feel." FGD-45-KB (mothers in programme)* *"I: Who involve fathers in the activities of exclusive breastfeeding programme? R6: Fathers also get involved through the announcement by town criers at night because that is the time they are relaxed at home after busy day. The town criers announce a meeting, the day, the time, the venue and the purpose of the meeting. Everybody will ask his wife/wives to attend and for those who were not opportune to attend those who attended would brief them on the outcome of the meeting. Our role is to make sure our wives attend such important sensitizations for a bright future for our children." FGD-11-KB (fathers)*	U R R R U
	Discordance in Katsina between parents and CV's over implementation of community component	*"I: After you join the program, where do you meet for the discussion? R: the hospital R: the hospital…. I: How many times did you go for the discussion? R1: At the end of every month, because if we stay much longer then we can forget some of the things that we are taught." FGD-47-KT (mothers in programme)* *"I: how do they carry out this programme in the community? Do they carry out this programme in the community? From one house to another sensitizing mothers apart from the hospital practices? R1: honestly they hardly go from house to house*	R

		sensitizing mothers. We always go to the hospital except for some times when they are giving mothers drugs, that's when they come around. R2: and when they are checking the health of children. R1: they select us into this programme because if they give us advice on our babies we follow I: so where do they gather you all to discuss and explain this to you R4: in the hospital I: how many times do this R1: well, they do this every Friday of the week because they have more population on that day than any other days of the week." FGD-48-KT (mothers in programme) *"I: Can you tell me how the program that is aimed at improving infant and young child feeding practices is done in this hospital? R6: They usually tell us what to do while we are pregnant, and that if we are about to give birth we will find it easy, and they usually tell us to go to the hospital whenever we want to deliver. After birth they also teach us how to feed the child. I: Is there any additional information? R4: The only thing that we will do is to advice our fellow women have to try and adopt this method of feeding because it is good for the children's health. Because some of them are complaining that their parent did not do it and that is why then will not do it too." FGD-47-KT (mothers in programme)* *"I: Now if you go to the hospital for example is it the doctor and the mother of the baby that seat down and discuss about this or they join you all together to explain this to you? R2: They explain to us all together I: Which of you have gone to the hospital this week? R1: I went on Wednesday R2: I went on Thursday I: Do they explain this to you there in the hospital when you went? R6: yes but when I arrived they have already finished I: But which day do they do this in the hospital R8: they do this on Wednesday and Thursday every week." FGD-48-KT (mothers in programme)* *"I: I see you want to say something? R8: Peace. I want to plead with this organization, just as you have opened branches, about five here in (mentions name of LGA), we want this organization to add one in this town, because when you look at the way this organization is supported here and how people are enlightened through this organization. We give our support a hundred percent for them to help us, we don't need to place our wives on bikes to go far, there are risks on the highway and we want this organization to bring it to us here." FGD-16-KT (fathers)* *"I: So now you hospital staffs, what kind of support do you give when carrying out this program in different communities? R: We go round to ensure that the messages they have given has reached them. And we go to the community head or a stakeholder to pay advocacy visit." IDI-6-KT (HW)* *"I: Now, how do you carry out this program to mothers? R1: for the mothers, we go house to house to tell them, we fully explain to the nursing mothers and pregnant women what to eat before and after birth and she mustn't give the child water until after six months. And when she gives birth and the placenta doesn't come out, they cut the umbilical cord and breastfeed the new born and it will fall out. R4: and then when we go out, we plead with them that there is a time of rest God willing, they should be patient, just as you are taking the trouble to take the children while your husband gives you money or he doesn't maybe, but as a mother do whatever you can to go there. We advise them because one day others will come here also." FGD-32-KT (FCVs)*	U R U R R R
Integration of IYCF programme into existing health services			
	IYCF is complementary to ANC and other health services (such as immunizations)	*"I: What is the difference between this program of IYCF and other programs like malnutrition, antenatal and also immunization for little children? R: Truly they are not different, they are all going under one umbrella. Because when a child takes breast milk from his mother he doesn't have to go for malnutrition milk. And then when a woman goes to the hospital for antenatal, that is where she understands the wellbeing of her child and there is no need for malnutrition and then when a child is on exclusive breast milk for six months he cannot go for malnutrition, but when a child is given water, truly he will have to contact malnutrition, you will see him lose weight and he will have to be taken to the OPD centre." IDI-1-KB (HW)* *"R: It's not really a difficult task for the health workers because it's all about*	U

		counselling, and when you counsel you do more of talking, it's not as if there is an additional work attached to it. And like we said integration, so we are integrating IYCF into other programs that are being done in the community. At least before an immunization session, there has to be a health talk, which is being given to the mother, so IYCF messages is also part of the health talk that the health worker gives out before other activities start. So even if it's an ANC day, there is also health talk and IYCF messages is also part of it, so I don't think it is much work for them." IDI-58-KB (health sector official) *"The thing came as already integrated, because this IYCF you know there are organizations that are set up that are called support groups, these groups go from house to house to inform people and it is through this they would bring the discussion of malnutrition into it, immunization, in the process of sharing information they would bring in the discus of ANC and the danger signs which if not paid attention to is harmful to the pregnant woman. So you see it is an opportunity this IYCF it opened a lot of ways through which other things can be brought into the health sector" IDI-64-KT (health sector official)*	N/A N/A
	CV's & HWs promote ANC and other health services during IYCF sessions	*"R6: I also advised her to go for immunization, she has taken two, remaining one R7: after the injection of BCJ, they are advised to wash the older children's hands before they eat and when a child goes to toilet or play, you ensure his hands should be washed before he eats. R3: we are sensitizing people. Some come regularly for antenatal and we educate them. R6: we look for them weekly and when it is time for delivery, we visit and tell them to give only breast milk so that he is healthy, he is healthy when he is given only breastmilk. So I keep advising them to give breast milk, it is healthier." FGD-25-KB (FCVs)* *"I: So what kind of work do you do in town? R2: In town? I: Yes R2: We go round, like the pregnant ones we sensitize them to go for antenatal regularly and then when the child is born he should be taken to the hospital so that he is checked for any ailment. And we also advise them not to give the child those herbs, they should bring them here for checkups." FGD-30-KT (FCVs)* *"I: Toh, sir what are the importance of IYCF? R: The importance of this program is very big. There are three main benefits importance, the first one is children are healed, secondly children are immunized, thirdly mothers have been lectured, they know the importance of ANC." IDI-63-KB (health sector official)* *"I: Can you describe to me the messages that are used for the IYCF sessions and the messages or the topics and how they are being delivered at your facility? R: the messages. Firstly like I have been repeating, there is not giving the child water, and then there is giving the child food after six months, and then there is cleanliness, and then there is immunization and there is counselling and when the child is sick, he should be taken to the hospital." IDI-3-KB (HW)* *"R3: We learnt about the exclusive breastfeeding and body building foods and also going for immunization, and when you take in, you continue to observe those advices given." FGD-44-KB (mothers in programme)*	U R N/A U U
	IYCF is well integrated	*"IYCF says that you should not allow sickness or malnutrition to set in, IYCF says that for women when they get pregnant they should attend ante natal because it is at the ante natal that you would be told the kind of good quality food to eat, IYCF again says that babies should come for vaccinations because every vaccination doesn't go beyond one year and in this one year, in the IYCF program the weight of the baby is checked every month so he comes for post natal then he would be checked how well he has been fed on breast milk and the vaccine he has taken. That's all, IYCF has become something that is important to the people in a lot of ways" IDI-66-KT (health sector official)* *"I: Okay, so where did you hear the news about this program since you know it is done? R9: We hear about this program during antenatal. He explains to us and then they go round houses with a book and show women that when a woman gives birth*	N/A

		this is how she is to care for him and all other things. I: You, have you heard of this program? R10: Yes I: Where did you hear of this program? R10: In this hospital I: In this hospital? But do you give water? R10: No I: How about you? Where did you get the news? R10: There at the hospital I: It was in the hospital you heard the news? R10: Yes I: Is it from the doctor or those in charge of antenatal? R10: Those in charge of antenatal." FGD-57-KT (mothers not in programme)	R
Referral system between hospital & community			
	HWs and CVs are actively referring women	*"R: Yes, what the health worker does is; after counselling the woman at the facility, he will ask the woman which of the community is she from so that he can also her that there is a support group in that community where she can join and become a member to preach the IYCF message which she has heard in the hospital." IDI-58-KB (health sector official)* *"I: So do they send anyone to you from the hospital? R3: Yes they send to us I: Who do they send to you? R3: The health workers, those that distribute drugs to the children, they send parents of the children and after they have sent them, they tell us to go and further sensitize them on the need for breastfeeding the infant." FGD-33-KB (MCVs)* *"I: So what are the ways you follow to ensure that they send more people to the hospital? R: The ways they send people to us here in the hospital is by explaining to them the importance of immunization and then the importance of health care. I: And for you here, what ways do you follow to make them send people to you here? R: when they come to the hospital, we encourage them very much, we educate them on the importance of cleanliness, and show them that most of the sicknesses come from lack of cleanliness." IDI-6-KT (HW)* *"I: So how do they ensure that the people in the communities that benefit from this program get to the hospitals? Like" referral" R: Yes I: From within the community they have seen that a person needs to be given something, and then they send such to the hospital. So how do they go about this? R: Yes, Toh, if they go into the communities and they see this kind of "issue" challenges that requires referral to the hospital, toh, they will advice the head of the house; the mother of the child or the father of the child; to go to the nearest hospital." IDI-2-KB (HW)*	N/A U R R
Monitoring & supervision			
	CV's want supportive supervision	*"I: What is the advice you will give for the improvement of this program? R: Advise, I don't have any advise other than to our facilitators, they should always come around to check on us…" IDI-35 (MCVs)* *"I: Do you think there is need for supervision R: Certainly yes, there are reports they go back to give. Their presence give the work some importance and we the CVs get more serious knowing that we are being supervised." IDI-36-KB (MCV)* *"I: And what is your opinion on the supervision? R: the supervision is okay, it is right because there are those that don't approve and when they are visitors, they agree. You know that they see us every day, but when they see outsiders, they agree I: do you think the supervision that is done is important? R: Yes." IDI-37-KB (MCV)* *"I: so do you think this supervision is important? R3: Very much so, it is important to us and to her too when she comes and meets us doing this work I: So when last were you supervised on this work? R4: Truly every week they come and check, wherever there is a problem, they tell us and show us how to fix it and where they have to come in, they come in until the work is finished." FGD-40-KT (MCVs)*	U U R U
	HW's are following up the CV's	*"I: You mentioned something about supervisors earlier on, who are these supervisors and what is their role in the IYCF program? R: The supervisors are health workers in the facility, the facility that is attached to the community where we implement IYCF, so they are there to oversee the activities of the community volunteers in the communities. So they supervise their meetings, supervise their activities in the communities to make sure things are going on well, apart from our own supervision."*	N/A

		IDI-68-KT (health sector official) *"I: in what ways do they supervise this programme? R: how the supervision is done is that, like me, for my support group, they tell me they are going to such a village, I will make a work plan, hang one up on the hospital wall here, then take the other to her there, because she usually come to the place where the meeting holds for supervision so that they can tell you what you should do, that is how we do it. I: and how many times is the supervision done? R: yes… I: in a month. R: in a month, like for me, I have three support groups, so for each team I try to make the put effort as I would visit at least two of such teams, and then you will see that whenever they will go, even if it is during the week end if she is around you will see that she tries to attend. And that is why she makes us ask them to go when it is very convenient for them, even during weekends. Even one time that we went that there was a mistake and we found the women having Islamic classes, and them again, even the XXX herself was there awaiting us to go there, and there she was waiting for us, and we didn't even inform her, she just found out for herself from this work plan, honestly, they come for their supervision." IDI-6-KT (HW)*	R
	Follow up & supervision happens regularly in Katsina state	*"I: Now do they supervise you? Chorus: They do, very much I: Is the supervision important Chorus: It is important R8: To check whether we go or not I: Please one after the other. So when last were you supervised? R4: the last was on the 25th of last month R8: That was the last time." FGD-30-KT (FCVs)* *"I: So when last did they come to supervise this work? When last did she come? R3: last Monday R7: Every Monday we are always with her and she comes on this. She will meet about 300 women coming to collect that malnutrition milk. And it is rare for her to be absent. R3: And then her coming gives people confidence that what we are doing is right, when they see two to three cars and we exchanging papers, it helps a lot. R6: Truly we are we enjoy their coming because if a supervisor is strict, you cannot learn from him, but she is very friendly and she will show you what to do gently and with a lot of jokes." FGD-38-KT (MCVs)* *"I: how is supervision done in the program? R: sometimes we are in the middle of the work and you will just see them, you don't even know that they are coming and when they inform you, you are sure to see them I: who comes for supervision? R: yes… {name} comes, uhm… this person comes… {name}, one {name} comes, from the office they come. Three Saturdays back or four Saturdays back they came about seven of them I: okay how do you see the supervision that is done? R: honestly it is okay because if there is any correction they would give it, there is no one that can say they do something a hundred percent except Allah." IDI-7-KT (HW)*	R U U
	Follow up & supervision seems less regular in Kebbi state	*"I: Uhm, so how are you people corrected with respect to the IYCF who does the corrections? And where do they give these corrections? R: The corrections are made at ward level and LGA level I: Uhm R: They come here and hold seminars with us, I: Uhm R: We also go there for meetings that how we hold them I: Toh when did you get the last corrections? R: The last corrections, I can't remember the date." IDI-2-KB (HW)* *"I: You need more training or more supportive supervision? That is the question R: Well, even supportive supervision is good because when they check your work regularly, you will improve, because if they don't check it regularly, sometimes, they can come unannounced and they will see that it is not good, but when they are checked regularly, then we will improve." IDI-3-KB (HW)* *"Do you feel the supervision is important? R5: Definitely I: What is the importance? R4: the importance? Because anytime there is a meeting, whatever you don't know, you will know it, and it will be recorded that on that day, there was a meeting I: So when last did they come to supervise on this program? R5: it is up to a year now R6: since last year I: since last year? Chorus: Yes. I: what is it in your capacity as CVs are you not supervised? R5: We feel very bad that no one supervises us R4: it helps when they come to check on us." FGD-28-KB (FCVs)* *"I: What are the challenges you face in this work? R: what we uh face uhm…. In this*	R U R

		program, like some of our leaders or facilitators are not consistent, they don't come for our meetings always because we get encouraged whenever we see them at our meeting with the drinks we get. Whenever you tell fathers that these facilitators would come they get excited." IDI-35-KB (MCV)	U
OBJECTIVE TWO: To get recommendations on how to strengthen the IYCF program			
Acceptance of the IYCF programme			
	Acceptance of the programme takes time	*"R5: Well the biggest thing we have to cope with is patience, because everything needs patience and it takes a while before people understand." FGD-33-KB (MCVs)* *"I: How many times is one trained before you can say he has finished the program on this exclusive breastfeeding? R1: some are quick to understand, and some are not, so when you explain some are convinced while some will panic saying they cannot, how can I give birth to a child to die? So we talk gently to them and after five days, we come back again and we joke and greet, then I ask what has happened from the last meeting we had. She shares her concerns with me and I talk to her to try it just once and see. I explained how she should breastfeed properly so that the child is satisfied." FGD-27-KB (FCVs)* *"I: So do you think there are any challenge or barrier that stops some women from carrying out exclusive breastfeeding? Do you think culture is a barrier? R1: Yes, but if we keep going to them and repeating the message, they will listen eventually" FGD-24-KT (grandmothers)* *"I: What kind of advice can you give so that there will be progress on the attendance of this program of exclusive breastfeeding? R1: Well, change is inevitable and you have to be a patient person and enduring and also one who is able to close his ears to so many things because you will see a lot of wrong. Someone may think you want to cheat him but if you are patient, he will turn around and see the importance. Now what is expected of us is patience and endurance." FGD-38-KT (MCVs)*	U U R U
	Seeing the "benefits" of the programme increases overall acceptance	*"I: So what do the community members like about this program? R4: What they want in this town I: No on this program. R4: What the people in this town want on this program is; out children do not have any ailment, no problem, they don't have any problem or challenge. Every child that is born and is up to seven months without giving him water, he is very healthy and we admire him because he is big and strong and doesn't fall sick." FGD-24-KT (grandmothers)* *"R2: I really accept this program in my household there is a child who after he was born, we didn't give him water until he was six months old. Honestly this is a light for us and we have seen it, we have really enjoyed it. I: yes, in this program of exclusive breast feeding? R3: I have seen so many things I like, I have seen the importance, honestly I have benefitted from it and I want the program to continue everyday because I am not praying that the program should end or a misfortune should come that would make it end, my desire is that it should continue all the time. Even if a baby is born and he is so small, once he is breastfed you would see how he would grow in size. I have benefitted from it." FGD-26-KB (FCVs)* *"I: How about fathers? How do you sensitize them? R5: we tell them that their role is very important and when their wives give birth, they should instruct that the child be given only breast milk, formerly the fathers don't agree but now they do because there was someone who tried it for six months and the child is healthy." FGD-33—KB (MCVs)* *"R2- like...we... what we see with people, well, the thing is we know that the people have accepted that they should not feed their children water until at least they attain the age of 6months, that was the initial challenge we struggled with, until when me in my house, when my wife was delivered of a baby and I instructed that the baby should not be fed water until he attains the age of 6months, they kept watching to see what would happen to the child, thinking that he would die and nothing happened, instead he was getting healthier. That was how that challenged dissolved. R1- even I, my own child's case was the same." FGD-34-KB (MCVs)*	R R U R

	Involving community leaders & elders increases acceptance	*"I: so do you think there should be a change on the ways this IYCF program is carried out in terms of attending to people regarding exclusive breastfeeding? R: well it is difficult changing the pattern of things, but there are some in the villages who understand, they participate and are well trained and also involve the elders I: Who are the elders? R: like the community heads and other stakeholders; traditional heads, politicians, all those that speak and are heard and trusted should be involved." IDI-61-KB (health sector official)*	N/A
		"I: So why is this program accepted? R: Because we involve the midwives. Any time any program starts, we involve the traditional heads, town criers and so on to educate people on what is going on." IDI-61-KB (health sector official)	N/A
		"I: so the men should be involved? R: yes, they should just be involved in the training. I: ok, or do you think that there is a need to change this programme of IYCF, especially in the area of religion or traditions or any such thing, do you think that the ways should be changed? R: well, yes…. I think that we it can, like when the meetings close, the traditional rulers should be involved, the traditional back attendants, as well as the local chiefs should be involved, you know sometimes, people pay attention mostly to their superior leaders, and when these people speak, the entire town tends to pay diligent attention to whatever they say." IDI-67-KT (health sector official)	N/A
		"I: At last, who can add something on how to encourage women and volunteers to continue their job without the program being hindered? R13: That can only be achieved when the government and the organization join hands with the Emirs, district heads, the local chiefs, the Islamic clerics, the Imams, and the health workers to get the support of parents and work together on enlightenment and sensitization programs. This is how the program will be sustained." FGD-11-KB (fathers)	U
		"R4: The challenges faced on this work is; we are asked to call speak with the men and when we gather to talk, the women gather but the men don't listen to us, they refuse and walk away, so we had that problem of not reaching the men and it is expected that the men are present even at home but they feel we are given something and we don't give them, so we explained to them that this is not for gain but for the good of the community, to ensure good health for the mother and children. So with that challenge, we engaged the community leader to accompany us on every outing. We inform him a night before and he will explain to them to listen just as the women listen. So that is the challenge that we got but when we met the community leader, it was removed. Anywhere we go, into the villages and elsewhere, we meet the community head. He will speak to the men and we will engage the women." FGD-30-KT (FCVs)	R
	Messages about family planning decrease acceptance	*"R2: Well it is in the aspect of family planning you may find resistance from people because you may want to say it but someone may read meaning to it and so you have to be careful and it is the person who understands that will know." FGD-40-KT (MCVs)*	U
		"R3: Salam mu alaikum, in addition, the problem we have is when someone accepts and another does not, one understands and another does not. They advice that a child is exclusively breastfed from first month to six months before complementary foods are introduced till the child is weaned. Secondly, they will say if it is possible the woman should not get pregnant until the child is well developed and some of them do not agree with this advice, they feel it is another strategy for family planning and so they say they are not interested. Because there are some women who get pregnant before they wean their current baby and if such is given this advice in some cases the husband might agree and in some other her husband might not agree." FGD-13-KT (fathers)	U
		"I: Which of them isn't really accepted? R: Family planning." IDI-8-KT (HW)	R
		"R: yes, well, honestly, the problem now is only one thing, when you arrange all the	

		cards, the people you gave the first advice for follow up, for now it is family planning, because it is in the card, and honestly, we hide the cards, because if they need it, we do not open it to them." IDI-6-KT (HW) *"R: myself when IYCF came when I checked the book I saw that they wrote family planning on it and I had a challenge understanding what brought about the family planning or child spacing into this program, and up till now it is one of the things that people don't understand but afterwards I understood so the main problem is that component that almost brought a challenge but through creativity and finding a way so that people would understand." IDI-66-KT (health sector official)*	R N/A
Attendance of IYCF programme			
	Providing refreshments & "gifts" to beneficiaries	*"R: The content is okay, the delivery I said we should include more communities, and then we should give a refreshment during meetings, even if it is water, during our support group meetings." IDI-68-KT (health sector official)* *"R1: there are challenges that we face especially when we are going to hold meetings with the groups, if some well to do people inform us that they would be at such meeting, we want to be assisted with any small amount that we would give to these people, some people tell us that when we invite them for these meetings we don't give them water and all that, that is just what I have to say." FGD-41-KT (MCVs)* *"…and if they will come they should come with some souvenirs for the support group so that these people will be encouraged to come for meetings when invited, if a mother comes with her baby and you give her something, you see tomorrow she will come again when invited. When people who have not participated in the meetings before see souvenirs from other participants, they will be encouraged to be in attendance. So please facilitators should come with souvenirs for mothers and children." IDI-35-KB (MCV)* *"I: So what lesson do you emphasize more on in the course of carrying out this program of exclusive breastfeeding? R7: what we want is something to give the women so that there will be more attendance." FGD-28-KB (FCVs)* *"R: honestly, like now, the way people know, like I did for you earlier, the problems that we see that can help, sorry, the steps that we see that can help in this work, if there is any form of assistance that can be given if they, they gather people together, like the way we saw that those people you gathered were given things like, even if it is soap to wash their hands, it can help to make people come if they are asked to come back again." IDI-6-KT (HW)* *"R: Like this program of IYCF, firstly, just like the organizers of the program have been told that this is something meant to be free and not compulsory or to make profit. But still yet, the kind of meetings we hold with our people, they grumble that we did not serve them refreshment, so we discovered that there is a problem. In my own section, I stated buying pure water and biscuits and sharing for them, anyone I invite, I give pure water and biscuit. And in a month, I do this three times, and then when we do this and I don't give anything, the next month, we will hardly get as many people as expected. But when we give it, the next time we have it, more people will come, if normally we have twenty people, then thirty will come." IDI-8-KT (HW)*	N/A R U R R R
	Permission from husbands is needed to attend group sessions	*"Except that the problems we are having, like I said to you earlier, those interior area that we cannot reach because there are people there that we ought to educate but we cannot and then the men too, they have to be dragged. Some of them do not allow their wives to do the exclusive breast feeding…" IDI-67-KT (health sector official)* *"I: So what obstacles do women face in carrying out this program? R: sometimes there are women who want to attend but their husbands refuses, so that is a big problem." IDI-61-KB (health sector official)* *"The problems being faced is just that from the men folk who pose the greatest challenge in this programme- I: just from the men, they are discouraging them? R:*	N/A N/A

		honestly. They do not support them, that is the problem for some of the men, so it is good to also educate the men, not just the women like I told you earlier, it would be very good to do so. I: so the men should be involved? R: yes, they should just be involved in the training." IDI-67-KT (health sector official)	
		"R: For a woman – you know, she must be permitted to go out – since the husband goes out, hears things and comes back home to tell his wife, so we talk to the husbands to please talk to their wives when they put to bed things that must be done especially exclusive breast feeding. We keep telling them this at every of our meetings." IDI-35-KB (MCV)	U
		"I: and the fathers, what kind of lessons do you teach them? R5: We teach them the need to allow their wives to attend the program because he doesn't know anything about breastfeeding and the advantages of exclusive breastfeeding for the period of six months and that is why we enlighten them, we cannot say all of them agree with this but at least ninety percent agree and send their wives." FGD-40-KT (MCVs)	U
		"I: So who do you think encourages the woman to attend this program? R2: Her husband." FGD-9-KB (fathers)	U
		"I: Is there any reason that may prevent you from attending the gathering? R9: It is only the husband that can prevent you from coming." FGD-42-KB (mothers in programme)	U
		"R1: Whenever we are asked to come for a meeting, some men stop their wives form coming because they believe this is nonsense, but our husbands who have allowed we (those present) to be here don't regard this program as nonsense." FGD-45-KB (mothers in programme)	R
		"I: What help do you receive from your husbands. R3: the only help that we need is that our husbands should be allowing us to go for the program, because some of them usually stop their wives from attending the program." FGD-47-KT (mothers in programme)	R
		"I: now what will you like the fathers to know to enable you to be carry on this programme? R2: we should let them know how this programme has benefited us, they baby and also the family so that when we tell them that we are going for such programme they will allow us because when you tell them you are going for the programme today and tomorrow you tell them again they will start complaining and some will not allow their wives go." FGD-48-KT (mothers in programme)	U
		"I: What are the reasons for not holding these meetings? R1: the reason may be our husbands, if you ask them and they stop you, you don't have any other choice. And if he allows you, you can go and listen to whatever news and be enlightened." FGD-49-KT (mothers in programme)	R
		"R5: I said for some it is the husband that doesn't allow it, that is it. Some allow for you to enter the program and another doesn't because you see this program is for the benefit of the woman and some don't want anything that will make the woman move forward, or discourage her saying she shouldn't agree with it." FGD-52-KB (mothers not in programme)	U
		"R5: We teach them the need to allow their wives to attend the program because he doesn't know anything about breastfeeding and the advantages of exclusive breastfeeding for the period of six months and that is why we enlighten them, we cannot say all of them agree with this but at least ninety percent agree and send their wives." FGD-40-KT (MCVs)	U
	Use of local media & town criers to get the message out &	*"R13: There should be different enlightenments programs based on exclusive breastfeeding on both television and radio, especially on radio since it is the common source of getting information and enlightening people in this locality. There should be discussions with those who tried it and witnessed the benefits so that others can*	U

	increase attendance	*follow." FGD-11-KB (fathers)* *"And then we need this organization, like these town criers, since you know in (mentions LGA) we have about seventy something town announcers, and in all it is only five that are working, those in the OPT area. So that is why we want a kind of orientation and get the remaining town announcers so that they can support us. We sit them down and map out where they should go and announce and create awareness to the women so that more clients can come from other areas." IDI-70-KT (health sector official)* *"I: Which advice can you give on how the program is being publicized? R14: Like my brother there earlier told you, the information on the program reaches us from our leaders through a town crier. What they need to do to improve is that the town crier should also announce that the program is free all you need to do is to go and listen, unlike now where they just announce date and time is when you go there that you find out it is free. So by announcing that it is free people will massively go there without the fear of spending money. The interesting thing is that our women like to attend the sensitization events now more than before, they are always eager for the days of the events to come, that is it." FGD-11-KB (fathers)* *"I: so what do you feel should be done to pass the message across to mothers regarding this program? R: Firstly I want them sensitized through media if possible a radio program since you know people here love listening to radio, so when there is a program for 15mins, even if it is once in a week, it can help to convince people." IDI-4-KB (HW)* *"…Discussions on radio should include exclusive breast feeding and the television too because no matter what you can't stop hearing about polio and immunization so it should be the same for IYCF and the communities should be enlightened all the more that not giving a child water doesn't bring problems to the child, it should be intensified so that people would understand well." IDI-64-KT (health sector official)* *"R: and then again, on the radio, I will never forget this breast feeding programme, some people have been doing it, like during the time of Dr. XX, you will see that on the radio she does this programme, so they also should try and do this thing, this Save the Children, this IYCF, should also try that channel because it helps a lot." IDI-6-KT (HW)* *"I: So is there any more explanation regarding the obstacles that stop women from attending this program? R3: Well honestly averagely there is good attendance and gradually more women understand (inaudible) for instance some people bring suggestions that if they can get musicians and put the message on a cassette and more people will listen, and people can also put it on their phones and share it with both husband and wife. So if this is possible, let it be done." FGD-38-KT (MCVs)* *"I: Now for instance if they want to pass information, how should they go about it, that is passing on the information so that women would know? R2: for instance on how the message should be passed on, just as informed us of your coming, so on the day you say you are coming, this house is where you should come and he will send the town crier to go house to house and pass on the information to the public, so this would make more women come on time. R6: And when you do that, you may get more than thirty persons." FGD-56-KT (mothers not in programme)*	N/A U R N/A R U U
Motivating & supporting CV's			
	Refresher training is important to maintain CV motivation	*"I: What is your opinion on the content of the training and the method of training? R5: Our desire is for those who trained us to come around and train us more on what to do so that we will do it R3: And so that there will be much progress in our group." FGD-27-KB (FCVs)* *"…there should always be a refresher training, it's not as if the training has been done so let them just continue with the work, there has to be refresher training from time to time, to refresh their memories on what has been taught earlier so that they can still*	U N/A

		continue with the good news of IYCF. I: Okay and how often would you suggest they do these trainings? R: every six or nine months." IDI-58-KB (health sector official) *"I: What is your opinion on the way health workers who carry out this program are trained? R: Truly they have given training since two to three months but there is need to do it again because people forget but when there is a kind of refresher training, it will be better." IDI-61-KB (health sector official)* *"I: What are the changes that you think can be done for the success of the campaign of exclusive infant breast feeding and other health related issues? R: The changes firstly, is that the CVs should be taken care of, and secondly the health workers and the CVs should be trained and retrained, then if all these are done you see changes in this program." IDI-60-KB (health sector official)* *"R5: The first main training we had was for three days, we were gathered together and we had it from morning to evening, this was done for three days. I: So when last did you have the last training? R6: After the last training, none was not done again, I remember when people came from the LGA and we met here at the primary, we were able to get twelve more people and which comprised of women in town, so that was the last training, there wasn't anymore." FGD-40-KT (MCVs)* *"I: What kind of support to you give as you carry out activities in terms of supervision and training? R: well, since the first training, we have not had any but they are working very hard and then the support we give them is; every day we advise them that those that we give this training are ours, they are not strangers but our relatives, when we do it to our own God will reward and so they should work hard and not look at what is given to them." IDI-4-KB (HW)*	N/A N/A U R
	Financial compensation	*"R: the problems on ground are most of the community volunteers we don't have incentives to give them and they are seriously working for us like they ought to and they need to be rewarded that if there is the ability to reward them it won't be a bad idea, so this problem they are just patient with us and they tell us most problems they encounter…R: when we done with the meeting we don't pick all of them, we can pick just three from each health facility with five catchment areas, we sit with them and refresh them with water, may be water and juice sometimes, and when we close we give them a thousand naira for their transportation. But with all that they've done we have not gotten anything tangible for them. So they are just patient even though we know they are disturbed, but we are praying if local government can help to give them something even if it's monthly to encourage their interest." IDI-60-KB (health sector official)* *"I: There are some people who work in the health centres as volunteers, how do you think we can support them to develop their work to make sure this program of exclusive breastfeeding continues? R11: For any voluntary group to be sustained, they need the support of the organization they work for in terms of financing, mobility, necessary working equipments and advices to ease their work. With this they will be on top of their task and the program will be a success." FGD-11-KB (fathers)* *"I: Is there any support you get? R3: no, there is none. R7: Except if they call for a meeting and everyone that came for the meeting was given a thousand naira that was the only support given." FGD-25-KB (FCVs)* *"I: What support do you get on it at CVs? R6: one thousand naira every month I: That is what you get every month? R5: That is all." FGD-28-KB (FCVs)* *"I: And then what problems are faced during this program? R: Well, you cannot omit problems because you know the CVs need something that will help them out because after every meeting, end of the month, normally we select two or three persons because they are thirty in number, and so we take three at a time and so we give them something small because there are some that come from the village." IDI-1-KB (HW)*	N/A U U R U

		"R2- Apart from that, even if anyone has any other job that would take most of his time, we would do this one first, because we have already committed ourselves to doing this one, we were not forced to do it, we volunteered to because we have seen that there is blessing in doing it. So we must do it with all our might, we can see again that it has brought a better health for us, indeed it is Allah that gives us health. Therefore, even if it comes to using our own money to enhance it, we would do so to Allah's praise. R4- It is only those that have a source of income or a means by which they can help out with finances that can say they would help financially, but anyone who has no means of income cannot commit himself financially." FGD-34-KB (MCVs) *"I: What more do you think should be done in supporting you in this programme? R: What more do you think should be done in supporting us in this programme? R: You see the way we are, we want to be helped with money like that, we need more help so that we can be more encouraged and strengthened to do the work." IDI-36-KB (MCV)*	R U
	Transportation assistance	*"I: So what kind of challenges are faced on this program? R: the challenge we face is because some places have not been reached and those volunteers, we don't give them any money, and so for some far places, they want to go but cannot." IDI-61-KB (health sector official)* *"I- What kind of assistance do you then need? R- Like something to climb to ease our trekking long distances, at least 5kilometres every morning... every ... from time to time, on foot. some other times, we get market vehicles to help bring us, sometimes we get to pay for the transport, other times, we take 'okada' and they bring us." FGD-34-KB (MCVs)* *"I: Is there something that doesn't go well? R3: well what doesn't go well is lack of money and then transport to convey us to places, truly there is difficulty, but still we are doing our best because we have committed ourselves to God to do it I: So what can be done to resolve the money issues? R3: Well, what should be done is every month, you should give us some kola so that we can be strong to do the work." FGD-33-KB (MCVs)* *"R4: Peace. What should be done or advice on what should be done so that we can sensitize more people is; firstly there is the aspect of movement, you have to have a motor cycle before you can move around and you have the desire to go and sensitize people but don't have the means to do it, and then lack of water is a very serious problem in our area such that even if we inform people, there isn't much water to cater for them, where it is done." FGD-40-KB (MCVs)* *"R3: peace. Like for instance the obstacles here are like when we are going to the villages, you have to get a motorcycle to take you, the money to take you and bring you back….R6: the addition is; just as she has said just as we take transport to go to the villages to sensitize, it is proper that whenever you gather people and sensitize them, and if you have something you can give them." FGD-31-KT (FCVs)* *"I: what additional assistance do you need to successfully implement this program? R3: the additional assistance that we need is like now that we are in the raining season some of the communities are not accessible and some of them are very far and we cannot walk there and now the condition is that there is no money, sometimes we don't have money to take transport that would take us there except that we trek there and trek back to our destination. That is how we go about it, sometimes it rains, it is either we wait for when the rains stops or sometimes we are caught in the community in the rain. Sometime of the communities have rivers and then there is the distance to consider." FGD-29-KT (FCVs)* *"R: But there are some persons that come from afar for the meetings; they come for the meeting and go back I: The volunteer committee R: Volunteer committee, some of them use public transport to and fro, come with his food, transportation so for this if God permits and it is possible, they can help them to cover this costs." IDI-2-KB (HW)*	N/A R U U U U R

		"R3: they can be enhanced with a provision of motorcycle, to make it easy for them to come because some of them do not have any means of transportation, like- but if they have a means of transport like a motorcycle, the work becomes easy." FGD-45-KB (mothers in program) *"I: How do you think these CVs can be supported so that they can continue on this program? R1: Peace. Whoever volunteers has sacrificed his time for his community and it is expected that anyone who does that should be helped so that he is encouraged and he can even bring others in. there are many needs a person has and doesn't do when he goes out, and so they should be helped with transport or something to enable them go into those corners because anyone who volunteers has given his life completely and needs support and working materials at every level from the community and especially this organization." FGD-16-KT (fathers)*	R R
	Encouragement & recognition	*"I: Their work, how can their work be enhanced, the CVs that come to talk to you, how can we enhance their work? R2: Only if we give them our support/corporation as women. R3: If women don't come out to support their work there will be no achievement" FGD-45-KB (mothers in program)* *"R3: at all times we get appreciation and blessings from women who have been taught on the importance of bringing up their babies in this way, we get appreciation and blessings… so you see we have progressed." FGD-41-KT (MCVs)*	R R
Clarity of messages & materials			
	Translation of counselling cards	*"I: Okay what is your own opinion about the content and delivery of the IYCF session, issue like the IYCF counselling process? Counselling session, the content R: that booklet, well if we can have it translated to the local language, I think it will curb…. Like if we can have some in Hausa and some in Arabic and use local pictures." IDI-59-KB (health sector official)* *"R: Just like I said, that the counselling card should also be translated, I think the translation is going on, but apart from that, I think every category of women is being captured on that IYCF message." IDI-58-KB (health sector official)*	N/A N/A
OBJECTIVE THREE: To determine the barriers & facilitators to behaviour change & to better understand how to motivate & support women with A) Exclusive Breastfeeding (EBF) and B) Complementary Feeding (CF)			
Barriers to practicing EBF			
	The belief that babies will die without water	*"I: Which cultural factors are stopping the women from joining the program? R2: people with wrong perception on the program, because they normally say that if a child died then the mother has not given him water even once." FGD-47-KT (mothers in program)* *"R5: formerly when you say you will stop water, we felt it was not possible but now we have seen that it is better for us than before. We see our children healthy and strong and because of that, we are emphasizing to our children to stop giving water, and the entire community and they too want relief so we are grateful, and may God continue to enlighten us. R6: we have seen the importance of it because it was six months before I started giving my child water and I have seen the difference amongst the children I bore." FGD-30-KT (FCVs)* *"I- will anyone give us an advice on how to overcome this challenge of exclusive breast feeding, because when mothers are asked not to feed their babies water they feel one wants to kill their child? R1- well, we have to be patient, because you see, when they receive strange information like this, it will take time for them to accept it. But we have to be patient." FGD-34-KB (MCVs)* *"I: Okay. Should IYCF information be delivered in a different way? R: Hmmm, you know the ways of a man, like now, I cannot just walk up to you and tell you not to give your child water, isn't that so? So even if it is something good, you will not accept it, but when we talk a little gradually up to the time when you will bring up the issue and tell her. And then you will tell her that this and that person also did the same. But you*	R R R U

		see, you cannot just approach her and tell her not to give her child water. Even if you collect the delivery, you can advise her that lack of giving water is helpful, because you have to start by telling her the benefits, because if you don't tell her, she will not agree." IDI-3-KB (HW) *"The truth is that it is very difficult for our people to understand its significance and embrace it at once due to cultural beliefs. Many of the villagers around here if you tell them about it they will see you as insane, thinking of how to deny babies water while it was not practiced by our ancestors. So it will take time before people massively support the program, the organizers has to do it step by step, and also those who saw its significance should tell others." FGD-11-KB (fathers)* *"R4 Well, you know some people want something while others don't. But mostly the women complain that if they don't give the infants water to drink, the babies will die. Others who accept, will say until they see a child that has not been given water during the six months, they will not practice it. But when they see that the child is looking healthy and well, they will accept to start feeding with breast milk only until the infant turns six months." FGD-20-KB (grandmothers)* *"R-You see like the exclusive breast feeding, we started having problems at the beginning, like I said their… they stop them, that they must give the child breast milk alone, that you just want to only breast feed without water, you want to kill the child with thirst, if he dies his blood is on your head, why will you stop him from taken, they collect the child and say let them give him non…(not clear) in our book there is the picture of a mother and her child and she is breast feeding but the…. is there she brings with her water and fighting her, and she is fighting her to give the child, but she would be explaining to her that in such a place we had a gathering or in the hospital where antenatal is done we have been enlightened that it does no harm, you see the child of that person in that house, she practiced it and nothing happened, if she persist, then she should would explain that the breast milk itself it's all water in it, there is no heat will kill him with thirst, in the breast milk he's taken there is water, if you explain, then you see gradually she would understand until she comes to accept it." IDI-69-KT (health sector official)* *"R5: Truly some women feel that they are inconveniencing their babies when they are told not to give them water for as long as six months they just think that their babies will contract a disease or something but we have not seen that. All our children are health." FGD-45-KB (mothers in programme)*	U R N/A R
	Disagreement from relatives about EBF recommendations	*"R17: The challenges are mostly faced by men because the way some wives confront their husbands on why they should deny their new babies water for six months feeling that is a great punishment. Mostly old women are the ones instigating some women, after you convince your wife to attend the enlightenment lectures and she becomes convince then her grandmother or an elderly woman from her relatives will spoil everything, or they will just come with a concoction and give the baby after starting exclusive breastfeeding already. So that is the major challenge." FGD-11-KB (fathers)* *"I: So how do you give the lesson to the grandmothers? R6: We explain to them since they are not the ones with the children. As long as the woman accepts, the grandmother is secondary." FGD-30-KT (FCVs)* *"R1: Yauwa, you see it is the tradition. Like presently, we are told not to give infants water, he should be exclusively breastfed until after six months. Toh, I agree and my wife practices this, it might happen that a person who is an elder in the house, and he has authority over both you and your wife. He may say he doesn't know about this, you are suppose to give your child water to drink with this problem, we can find this happening without your knowledge because your wife may be feeling shy to come and tell you what is going on." FGD-16-KT (fathers)*	U R R
	Husbands need to give permission for	*"And the man needs to be convinced before he agrees, because he can say he doesn't agree that the child should not be given water, but when you explain fully to him, because you as the mid wife takes the delivery and you have to explain to both*	

	EBF practices	*the mid wife and the husband. He has to agree because even if a woman agrees, the man may say he doesn't agree, he took water and so should his child. So when they explain to him, the wife is strengthened since her husband agrees. But if the husband doesn't agree, she doesn't have a say." FGD-30-KT (FCVs)* *"I: Can you tell us how you carry out this program of exclusive breastfeeding with fathers, mothers, and grandparents? R: I can only tell you a story on how it is done with mothers because some fathers don't approve of it and even if the women agree, they cannot do it. Like there was a time a woman gave her child exclusive breast milk and they saw that nothing happened to her and the child was fine." FGD-37-KB (MCVs)* *"…except that the problems we are having, like I said to you earlier, those interior area that we cannot reach because there are people there that we ought to educate but we cannot and then the men too, they have to be dragged. Some of them do not allow their wives to do the exclusive breast feeding... " IDI-67-KT (health sector official)* *"R2 – Well let me talk. You have a child, you discuss about the child's feeding with husband and you tell him what they told you in the hospital and what you are instructed to do. When he sees that the method of the child's feeding is good then he will agree and it will be done, but when he says no and not being satisfy with what he was told then it will not happen. He seriously has the say. (All respondents laughed) so what will you now do?" FGD-23-KT (grandmothers)*	R R N/A U
Facilitators to practicing EBF			
	Visible changes – fatter, healthier babies	*"I: so what do you understand by improved infant and young child feeding practices? R: exclusive breastfeeding like I explained to you helps them to grow stronger and healthy and brilliant, because anyone that is breastfed has more brain development more than those that are given water." IDI-61-KB (health sector official)* *"R1: breastfeeding alone we are happy and we give thanks to God, because we have seen the benefit of the program, because now our children do not fall sick frequently. R3: There is improvement because we have seen the difference between the children that were giving water and the once that are not giving water." FGD-47-KT (mothers in program)* *"I: What is your opinion about strictly breast feeding babies without any water for 6 months after birth? R8: At first we didn't know about it and the first thing that we did after giving birth was to give them water. Later on they came with pictures showing us the difference between the babies that were giving water and the ones that were not. From this we understood the benefits of strictly breast feeding new born babies and we used it." FGD-42-KB (mothers in program)* *"I: What should be done to encourage mothers enrol for this program? R1: Well we have been sensitizing them, even if a mother is not persuaded, when she sees the child of another person, she will ask how it happened, and then she too will enlighten others, so we are grateful and we are happy." FGD-49-KT (mothers in program)* *"R1: Yes I know something about the program, I even have a story to tell. There was a child in our neighbourhood, when he was born, the health worker advised his mother to do exclusive breastfeeding and the mother followed her instructions and did it. I can tell you that we all testified that the boy grew up faster than all his mates and in a very good state of health." FGD-11-KB (fathers)* *"I: How does this program attract you? R2: Benefits, because we have tried it and it is good that is why we keep doing it. And we talk to them about the benefits. R4: Because the people see the advantage of doing it from their neighbours, that is why they accept it." FGD-17-KB (grandmothers)* *"R4- what makes it different is that whoever is not fed water, he is usually bigger,*	N/A R U R U U

		understands better, and looks healthier than the counterpart" FGD-34-KB (MCVs) *"R4: We discuss about how to convince household heads that don't accept the program, be it men or women, we will draw their attention because some of them don't understand what is happening until they see their neighbours that have done it and are healthy." FGD-33-KB (MCVs)* *"R5: formerly when you say you will stop water, we felt it was not possible but now we have seen that it is better for us than before. We see our children healthy and strong and because of that, we are emphasizing to our children to stop giving water, and the entire community and they too want relief so we are grateful, and may God continue to enlighten us. R6: we have seen the importance of it because it was six months before I started giving my child water and I have seen the difference amongst the children I bore." FGD-30-KT (FCVs)* *"I- ok, so this training pattern, which has a much smoother take-off, and which one is more acceptable which is going well with you in your capacity as the group involved in it and what do you think is not going well? R2 like...we... what we see with people, well, the thing is we know that the people have accepted that they should not feed their children water until at least they attain the age of 6months, that was the initial challenge we struggled with, until when me in my house, when my wife was delivered of a baby and I instructed that the baby should not be fed water until he attains the age of 6months, they kept watching to see what would happen to the child, thinking that he would die and nothing happened, instead he was getting healthier. That was how that challenged dissolved. R1- even I, my own child's case was the same. R3- I realize that food is really important because we have tested it and seen that some of the things that were done, you see, those that have been fed breast milk exclusively without water perform better than those who were fed breast milk with water..." FGD-34-KB (MCVs)*	R U R R
	Visible changes - placenta comes out easily	*"R: they too explain themselves that; yesterday a woman gave birth and her placenta didn't come out and when the child was placed given to suck, the placenta fell, so you see all these are experiences they witness. They were told and they tried it and saw that it's true so you see they are more enlightened." IDI-62-KB (health sector official)* *"R1: what we see is it that they said if a baby is born we shouldn't give him water and we have done that and we have seen the success in that, and when they said when a woman puts to bed and the placenta doesn't follow we should give our support that the umbilical cord be cut and the baby should be put to the breast to suck once he sucks the placenta would fall out, we have done that more than once and we have gotten successes. R2: we have gotten successes" FGD-26-KB (FCVs)* *"I: So like when do mothers give their infant's breast milk when they are born? R: when? I: Yes R: at the time she gives birth, and when the placenta doesn't come out, immediately she breastfeeds, the placenta comes out." IDI-12-KB (fathers)* *"And then, the moment she gives birth and the child is placed on breast milk, her placenta comes out, and there is no loss of blood. It wasn't done in our house but our mid wives have witnessed this." FGD-38-KT (MCVs)* *"And then secondly I like people seeing results from the advice we give to them, when they go home and try it and it works and especially when a mother's placenta doesn't fall but later falls as a result of breastfeeding, so that has reduced many problems. That is what is being practiced in town, the placenta doesn't fall but the moment she puts the infant to breast, it falls off unlike before when they don't give the child water only traditional medicine because they believe that the milk is not good and so the child suffers a lot, so you see this is very important." IDI-4-KB (HW)* *"…aside that again, what we see from it is that when a woman gives birth and the placenta does not come out, when the baby is put to the mother's breast and he sucks a little, the placenta falls out. And again, if the baby is fed before the mother is cleaned up, is Allah wills, whatever he is told, he will listen. Then again... we have*	N/A R R U R R

		seen full addition of women who have received medication have felt accomplished, thoroughly fulfilled. Yes." FGD-34-KB-KB (MCVs)	
	Halting menstruation a motivating factor for EBF (possibly only from CV/HW perspective)	*"R4: the women themselves they benefit a lot through family planning because it gives them some space in child birth until the baby is old enough to be weaned" FGD-29-KT (FCVs)* *"R5: the benefit women get is; for some, it leads them to family planning. You will see that the moment she weans the child, that is when she takes in, but if she is on exclusive breastfeeding without water, her period doesn't come on time until another time when she is ready to take in, by then the child is healthy and strong" FGD-30-KT (FCVs)* *"And then apart from that, this kind of trouble of getting pregnant when the time is not yet right, if a woman feeds her infant breast milk exclusively without water, she would not get pregnant." FGD-34-KB (MCVs)* *"R7: When a woman embarks on this exclusive breastfeeding, it helps in the area of family planning, she doesn't have to meet the doctor." FGD-38-KT (MCVs)*	U R R U
Barriers to practicing CF			
	Lack of affordability & availability of food products	*"I: like which kind of message do u have for those that are saying you should give meat, beans, eggs and so on is there any message the women have? R3: Well some of the women are asking where they will get the money to buy the eggs, meat that they will give their children. They should be considered." FGD-42-KB (mothers in programme)* *"R2: some of the family can afford the three stars of food, and others cannot, and whatever they have is what they eat." FGD-47-KT (mothers in programme)* *"I: From the messages passed on, what message passed on in the program for women to implement do, for example making use of, animal fat, fruits and vegetables, oil in her food, which of these will she find difficulty implementing? R3: Asalam mu alaikum, in most cases, what is difficult for us is food containing oil from animal. It is difficult for us Runknown: Food containing oil from animals is difficult for us." FGD-13-KT (fathers)* *"I: What do you think encourages the mothers to give that to their children? R3: it depends on the financial status of the father, because the husbands sometimes cannot afford that." FGD-22-KT (grandmothers)* *"…and the other problem is in the place of the complementary feeding, some people do not, cannot afford the kinds of meals, some women would come crying that they don't have what to feed their children with, they have been taught but they cannot afford it. It then becomes a problem because some men do not support their wives with respect to this." IDI-67-KT (health sector official)*	U R U R N/A
	Husband in charge of spending for food	"I: so what other messages do you feel the women shouldn't carry out, in terms of the foods they eat? R5: Yes, they can say that we here are from the village, and give the excuse that their husbands don't have money to buy those kinds of foods. And then we tell them that you don't need much money whenever God gives you money you just buy a little eggs for your wife, fruits and liver and then you fetch moringa and give her to eat and the blood in your body will be replenished." FDG-24-KT (*grandmothers*)	R
	Disagreement about access to foods	*"I: Now amongst these foods I mentioned, do you think it would be difficult to introduce? R3: That is not difficult at all because all of us here have them, we have water melon, we have soy beans and we tell them to get soy beans and add it with groundnut and millet and ground it together, and fish and give the little children less that 24months old." FGD-25-KB (FCVs)* *"I: Okay, what changes are difficult in carrying out on this program, for instance using soybeans, groundnut, animal products, which do you feel is difficult to prepare? R4:*	U R

		Peace. For us here, truly soybeans is not difficult to go get and since we rare chickens, egg is not rare, it would be good to give the child one egg in a day." FGD-30-KT (FCVs) *"I: Meat and fish? Do you think the women can cope with that? (Laughs) (Cross talks): Yes R4: Wait and hear, a little egg of twenty naira R3: It is now fifteen naira now I: Is there a woman who can buy her child an egg of fifteen naira? R4: Of course, many (cross talk) we also have businesses in this village, we are not seating down." FGD-32-KT (FCVs)* *"I: So what changes do you feel is difficult to carry out within work? (Silence) I: (repeats question) R1: Well, truly there is nothing difficult because all these things, we have them in abundance I: Like what? R1: like soy beans, egg, meat, averagely we have them here and so there is nothing that would be a problem carrying it out." FGD-33-KB (MCVs)*	R U
Facilitators to practicing CF			
	Tailoring counselling advice to recommend/highlight foods that are locally available & affordable	*"R: ok, the advice I would give is only on one thing. The card that we use, I understand that the way it was made, everyone would be able to use the card, you see for instance, our foods, like if you say those of Zaria and ours here in Katsina, you will see that there are differences,- I: yes, there are differences, R: what we need to do about the food is that, in the… where they put the kinds of food, pictures should be taken in order that people will know what a particular food looks like. Like for us here, they can put the picture of corn while for that of Zaria they can put the picture of yam because these two kinds of food add the same nutritional value and are peculiar to these places respectively. Or we can say for us here, the picture of soya bean should be included, you know it isn't hard for us to get soya beans here,- I: mmm, yes- R: and it does so much for the body. So they will put those things that would not be difficult or too expensive for us to acquire, so each town should have a special card with their own specific food items. Like you see this indomie that people eat everywhere, someone that eats only maize/corn would think that one who eats indomie noodles eats a better kind of food, not knowing that they both are of the same nutritional value- I: yes, that's true- R: so these are what should be included in those pictures, such that when a person picks it up he knows what to do and it would not cause him so much trouble to acquire." IDI-6-KT (HW)* *"I: What is going on well and what are the challenges in the whole program on these sessions you have with them? R: Everything is going on well, the only challenge is that some of the food materials, because of "poverty" they complain to us that their husbands do not give them, but we show them that these foods are within their environment." IDI-71-KT (health sector official)* *"R: well truly, we cannot say there is no food, but there are two things that is affecting communities everywhere; one is lack of understanding. It is possible you have food and everything, but some foods that build the body such as meat, egg, beans, you don't understand them and you take them to sell in the market and bring back starch, you see you have not done anything in terms of building the body. So that should be fought so that they can keep these foods and it is available in their homes and then again hygiene, she may have everything but is not clean and so when they eat they begin to vomit and stool so you see it is important to educate people on the importance of cleanliness itself." IDI-62-KB (health sector official)*	R N/A N/A
	Holding food demonstrations to show mothers how to incorporate CF recommendations into daily cooking practices	*"I: Do you also feel that the messages should be given in a different way? R: Yes, like in food demonstration, if we are talking about complementary feeding, maybe a particular day will be taken out for food demonstration, and they will see how it is being prepared, probably they will do same in their houses." IDI-58-KB (health sector official)* *"I: what do you recommend for us to add to those information? To give these women or do you feel that what is being delivered to them is current okay or is there any other information we should include before giving to women? Especially about IYCF R: Toh is only – think I said it earlier that this food demonstration in the facility, then*	N/A N/A

		posters, these mobile theatres and if you can give the net to them? Fine and good, is yes, you give them, the women that they don't have these net in their houses, provide net for them, the women that uh Don't know how to do the cooking of quality diet let her go to the centre where the food demonstration is being done to see and then you add with posters, different posters to give the household members, then these mobile theatre…" IDI-65-KT (health sector official) *"R: Then giving of food of appropriate foods because parents have these food within the local community, we have it I: It is so R: But the lack of education on how to prepare this is what is lacking, so the method of preparing this is what we require in the training. IDI-71-KT (health sector official)* *"R: Like for example in our hospitals, like those that… if there is the power also with the other hospitals, but if there is no power to do this for all the hospitals, like those that we do the IYCF, they should put a woman in every hospital, they should do a full demonstration unit, so that any time they come, even if it the message is supposed to be passed verbally and one has forgotten when they come, they should be demonstrated for them to see. Today and tomorrow, if we continue doing this, just the way I do them…host talk for those that come for antenatal, we gather them and do them….heads talk, when we finish we ask if there is anyone that understand what we just did, they say yes, and we say if you understands,….you see this is food demonstration, if I do, I ask did everyone see how we did it, they say yes, then I will say can one come and show us how this was done, one will come and do it, while others are watching, you see she did it and seen it, while another too want to do it too, she has seen how it is done and she has learnt too." IDI-69-KT (government official)*	N/A N/A
General strategies to increase uptake of IYCF recommendations			
	Group vs. individual counselling sessions	*"R2: the group training is better. I: You do not talk. R4: the group training is better than the individual training, because what an individual do not understand then the other person will understand." FGD-17-KB (grandmothers)* *"Which way do you think is more efficient in learning more about this IYCF program? Should it be done one on one or done in a large gathering? (All Respondent) should be done in large gatherings. It is better. R7 It will be more preferable if it is done in groups or gatherings, so that people will learn better." FGD-20-KB (grandmothers)* *"R1 – Well as for me gathering us is much better because when women are selected maybe in twos'. When the teacher ask you question or tells you something you will just agree to it even though you don't really understand but you see, when you are many, you can learn from what someone observes or ask." FGD-23-KT (grandmothers)* *"I: Apart from it, what of in the area of counselling? Does it take your time a lot, like counselling people on IYCF? R: Well you know counselling depends, you know it is done in a group, it is a discussion where people will hear, but if it is one person at a time, it may be that as you are counselling, the person you are counselling is asking you questions, that also takes time. But if it is done for many people, not many will be able to ask questions because you see women are private and it is not everyone that will want to say something in public." IDI-3-KB (HW)* *"I: at a particular place, which is more beneficial/yields more result? R: well, if…if...you want to give percentage, honestly, the one that is usually discussed one on one enters better- I: that is so- R: because like I said, this work, we do the gathering just once in a week, even if you use speakers to enlighten them they would just say ok they've heard, and so what, they are just even lying. But if you sit down with one person and, as it is, you do not know what is on his mind. But if you sit and rub minds together and understand one another, you will see that you would reach a consensus. Because you will notice that some people understand better that way, so if we can sit down and discuss one-on-one, there would be better understanding and better progress." IDI-5-KT (HW)*	U R U U U

		"R1: the most effective is when you meet with people as a group and explain to them because when you do that in a group, even if someone doesn't understands, another will explain to him until they understand. I: So which do you do most? R1: We do it more in a gathering because it is more effective." FGD-33-KB (MCVs)	U
		"I: So the discussion you have, which is more effective? As a group or one or one? R: Well as a group is better because on this program of exclusive breastfeeding, there was a time we had a meeting and they understood but when you go to one person, he may not agree and feel you want to harm him, and in such cases we will leave him." IDI-37-KB (MCV)	R
		"I: which is more effective, having it with one person, one on one or as a group? R3: When there is the opportunity, the group of ten is more effective. I: Is there any more explanation on the lesson learnt or the way it is discussed; in group or one or one? R7: Peace. (Quotes a proverb) you can gather them in a group and there may be something someone doesn't understand but as it is being discussed, he will understand and then all the people gathered can become representatives such that even when you go back home, you will inform them, this is against just one person you teach." MCV-38-KT (MCVs)	R
		"I: when you compare teaching people in a group or one on one, which if more effective? As a group is preferable, R2: because everyone will understand and if someone doesn't come, the person who comes will tell him about the different gatherings and what is taught. but if it is two persons, not any people will be reached." FGD-27-KB (FCVs)	R
		"…individual discussion or group gathering, which is better? R5: the meeting is better for us. The reason I said the meeting is best is because if a woman hears, she will join. But when you meet a woman in her room, she will not take your advice, but when she comes to a gathering and everyone hears and agrees, like now you have called us and we have all come, you see we can whisper amongst ourselves if this is genuine." FGD-28-KB (FCVs)	R
		"R3: The grouping was a good idea because one who is ignorant can gain from others and become knowledgeable. I: During your last visit on the program, were you grouped according to organizations or individually? R2: It is by organization R1: They prefer to put us together so they can have a rest of mind, receive quality information and be peace. What you don't know, you can ask." FGD-43-KB (mothers in programme)	R
		"R5: Truly someone may understand better if you talk to her alone, another person may understand better if taught in a group I: You think one on one is better? Which way do you say is better? R5: You said, like if it's one on one someone may agree someone gets to understand when in group. Not everybody agrees with such things. Especially the part that talks about not giving a child water for the length of six months I: That means one on one interview is better, right? R5: Toh, me, well I am talking about some women because someone R6: Toh, why, why do they prefer that? Why do you think they will prefer one on one interview R5: Because in a group this person says his opinion, the other says his, toh this does not keep some people calm to listen to what is being said. Until for example when a person is talked to calmly one on one, the person may get to be calm, listen and even agree with what is being said. Not everyone can be calm when in public to listen to things it is exceptional. As for us we stay in the group and its useful to us." FGD-45-KB (mothers in programme)	R
		"But do you want to be sensitized individually or in group? R1: I want it done individually because in group some will not leasing to some things being said because they will it's irrelevant to them cos people have in mind what they want to be sensitized about but when is done individually, you can seek their advice on what you want to know and they will explain it to you better. R2: I want it done in group because in the case where someone forgets another person will remind you of it because that person was also there and even if another person is not there you can explain to that person and will be well understood." FGD-48-KT (mothers in	U

		programme) *"I: So when we take note of the method of teaching, which is more effective; teaching as a group or one person at a time? R3: Truly the one on one is more effective, because as a group, someone is busy talking behind and doesn't pay attention to what will enlighten him so that he understands what is being taught. And you can tell someone but his mind is somewhere else so he will not take what you are saying." FGD-49-KT (mothers in programme)*	R
	Messages need to be repeated in order to see behaviour change	*"I: So do you think there are any challenge or barrier that stops some women from carrying out exclusive breastfeeding? Do you think culture is a barrier? R1: Yes, but if we keep going to them and repeating the message, they will listen eventually" FGD-24-KT (grandmothers)* *"I- will anyone give us an advice on how to overcome this challenge of exclusive breast feeding, because when mothers are asked not to feed their babies water they feel one wants to kill their child? R1- well, we have to be patient, because you see, when they receive strange information like this, it will take time for them to accept it. But we have to be patient." FGD-34-KB (MCVs)* *"R5: Well the biggest thing we have to cope with is patience, because everything needs patience and it takes a while before people understand." FGD-33-KB (MCVs)* *"I: What kind of advice can you give so that there will be progress on the attendance of this program of exclusive breastfeeding? R1: Well, change is inevitable and you have to be a patient person and enduring and also one who is able to close his ears to so many things because you will see a lot of wrong. Someone may think you want to cheat him but if you are patient, he will turn around and see the importance. Now what is expected of us is patience and endurance." FGD-38-KT (MCVs)* *"I: How many times is one trained before you can say he has finished the program on this exclusive breastfeeding? R1: some are quick to understand, and some are not, so when you explain some are convinced while some will panic saying they cannot, how can I give birth to a child to die? So we talk gently to them and after five days, we come back again and we joke and greet, then I ask what has happened from the last meeting we had. She shares her concerns with me and I talk to her to try it just once and see. I explained how she should breastfeed properly so that the child is satisfied." FGD-27-KB (FCVs)* *"I: So now, with the challenges that you have mentioned, what can be done to reduce these challenges? R: What can be done is; you know such things cannot be removed at once, so what I will say is that we will not get tired of telling them because if I am with you and there is something good, if you try it and see its importance, I too will do the same so you see our work is to tell them and we will not get tired of telling them, gradually they will do it." IDI-3-KB (HW)* *"I: So what obstacles are faced during this program? R: Well there are because you know culture the way it is. Some have difficulty with overcoming culture and so you have to keep sensitizing them over and over again, so that is the obstacle we have – culture." IDI-61-KB (health sector official)* *"I: what do you see is going on well and what do you see not going well, that have little problems? R: let me talk on what is not going on well. The problems we encounter is that those that come out for the teaching, those from the villages, the men and women, they take a lot of time to understand what we are trying to preach, while others once you've visited once, twice or thrice, they think you are not saying the truth, while others once you teach they immediately pick those advice and make use of it and also advice their relations." IDI-60-KB (health sector official)* *"The truth is that it is very difficult for our people to understand its significance and embrace it at once due to cultural beliefs. Many of the villagers around here if you tell them about it they will see you as insane, thinking of how to deny babies water while*	R R U U U U N/A N/A

		it was not practiced by our ancestors. So it will take time before people massively support the program, the organizers has to do it step by step, and also those who saw its significance should tell others." FGD-11-KB (fathers)	U
	Women are motivated because they want healthy children	*"I: Okay, so why it is important to the women and mothers to follow the IYCF practices the young ones good food. According to you guys why do you think it's important for the mothers to do so? R8: So that the children would be healthy. R9: Our children being healthy is the main reason, that's why it's important for the mothers to do so. Chorus: Yes that's why, that's the reason!" FGD-42-KB (mothers in programme)* *"I: Why do you give the child egg, moringa and other fruits? R6: It is because it is good for the child healthy." FGD-47-KT (mothers in programme)* *"So what kind of messages are the women given regarding how to carry out this program, for instance eating soy beans, groundnut, and animal produce and other body building foods, so what kind of messages are given so that they are convinced? R12: Well the big message is that the woman sees it, there is no one that loves the child more than her, she is closer to him and so does everything to see that the child is healthy. The joy of parents is to see that their children are healthy and strong." FGD-16-KT (fathers)* *"I: Why is it important for women to follow good complimentary practices? R: So that the child will be healthy and strong." IDI-3-KB (HW)*	U R R U
Evidence of changing local practices			
	Not using traditional medicines anymore	*"R7: We normally give our children traditional medicine before normal medicine but we were told not to give them traditional medicine until they are 9 months old. Now that we know about the normal medicine from the hospital we have stopped using the traditional one. R6: we don't even have any more traditional medicine, we only use medicine from the hospital." FGD-42-KB (mothers in programme)* *"R3: Well we now hardly use traditional medicine, we have refused to take it, when there is a problem, we go to the hospital. We are enlightened and know the importance of going to the hospital, when your child is not well and once you go to the hospital, the purging stops. R4: and another reason why we do this is because we understand that whenever we go to the hospital, the health workers advise us that traditional medicine adds more sickness to a child, and that is why we will not give it." FGD-49-KT (mothers in programme)* *"I: so what time do you start giving traditional medicine? R4: Now since this organization came, we don't give traditional medicine (cross talks) R5: we have gone beyond that level R4: Now it is just breast milk I: What about other things like prayers? R5: that is given when you want to wean the child, it is given to prepare his heart." FGD-24-KT (grandmothers)*	U R R
	Mothers practicing exclusive breastfeeding without water until 6 months	*"In the past we used to give them water but now we don't. We clean our breasts regularly and whenever there is a need we breast feed the child. We breastfeed them for 6 months and then after that we start to give them some water and some solid food" FGD-42-KB (mothers in programme)* *"I: So when do people give their children water after deliver? R3: well, formerly they give him water after two weeks of birth out of ignorance. But today they don't give him until after six months." FGD-9-KB (fathers)* *"R5: before the mothers feed their children's with water and now they feed them with breast milk alone and they have seen the difference." FGD-22-KT (grandmothers)*	U U R