Distribution Agreement

In presenting this thesis or dissertation as a partial fulfillment of the requirements for an advanced degree from Emory University, I hereby grant to Emory University and its agents the non-exclusive license to archive, make accessible, and display my thesis or dissertation in whole or in part in all forms of media, now or hereafter known, including display on the world wide web. I understand that I may select some access restrictions as part of the online submission of this thesis or dissertation. I retain all ownership rights to the copyright of the thesis or dissertation. I also retain the right to use in future works (such as articles or books) all or part of this thesis or dissertation.

Signature:

_____ _____

Saiza Firoz Jivani Date

Gaps, Barriers and Opportunities Related to Infant and Young Child Feeding Content (IYCF) Across CARE Staff (Regional Outreach officer, Block Coordinator, Health Sub Center Meeting Facilitators) and Auxiliary Nurse Midwife in Bihar, India

By

Saiza Firoz Jivani

Master of Public Health

Hubert Department of Global Health

_____ [Chair's signature]

Professor (Dr) Reynaldo Martorell

Committee Chair

_____ [Member's signature]

Dr. Melissa Fox Young, PhD

Committee Member

Gaps, Barriers and Opportunities Related to Infant and Young Child Feeding Content (IYCF) Across CARE Staff (Regional Outreach officer, Block Coordinator, Health Sub Center Meeting Facilitators) and Auxiliary Nurse Midwife in Bihar, India

By

Saiza Firoz Jivani

Bachelor of Dental Surgery

Rajiv Gandhi University of Health Sciences

2009

Thesis Committee Chair: Professor Reynaldo Martorell, PhD

An abstract of
A thesis submitted to the Faculty of the
Rollins School of Public Health of Emory University
in partial fulfillment of the requirements for the degree of
Master of Public Health
in the Hubert Department of Global Health
2014

Abstract

Gaps, Barriers and Opportunities Related to Infant and Young Child Feeding Content (IYCF) Across CARE Staff (Regional Outreach Officer, Block Coordinator, Health Sub Center Meeting Facilitators) and Auxiliary Nurse Midwife in Bihar, India

By Saiza Firoz Jivani

Introduction: In Bihar, child under nutrition is a major public health concern as, 56% are stunted, 27% are wasted, and 56% are underweight. Timely initiation and age appropriate complementary feeding helps ensure proper growth and development of children. Although improving complementary feeding amongst children between the ages 6 and 24 months is critical to improve child nutrition, progress has been slow. CARE-India has launched an Integrated Family Health Initiative (IFHI) program (2011-present) to improve maternal and child health in Bihar. One of the aims of this program is to improve the capacity of community Front Line Workers (FLW) through enhanced training and job aids to facilitate effective IYCF counseling for families.

Objective: This study aimed to assess gaps, barriers and opportunities related to IFHI program to improve child nutrition in Bihar.

Methods: 44 in-depth interviews were conducted with CARE members, including Regional Outreach Officers, Block Coordinators and Health Sub Center Facilitators, Auxiliary Nurse Midwives, FLWs and beneficiaries to gain individual perspectives of IYCF content and program delivery related to complementary feeding in Bihar, India. The data were analyzed using systematic coding and thematic analysis approach.

Results: Numerous gaps and barriers are observed in the delivery and practice of IYCF recommendations. The barriers include poverty, certain cultural and religious practices, misconceptions on feeding practices, discrepancy in knowledge of complementary feeding among CARE staff and FLWs, lack of use of job aid kit, and lack of motivation among FLWs. Also, at the HSC meetings, lack of available infrastructure and resources pose barriers to effectively communicate complementary feeding messages to the FLWs.

Discussion: Complementary feeding was introduced at the HSC meetings 6 months prior to conducting the interviews, and in a short time, awareness about complementary feeding counseling had spread across CARE staff, ANMs and FLWs. However, several gaps remain to be filled to improve the effectiveness of complementary feeding training and counseling. Recommendations to improve the CARE IFHI program include emphasizing the importance of the job aid kit, explaining the long term benefits of complementary feeding, passing consistent and well defined messages to all program implementers, and providing incentives to FLWs.

Gaps, Barriers and Opportunities Related to Infant and Young Child Feeding Content (IYCF) Across CARE Staff (Regional Outreach officer, Block Coordinator, Health Sub Center Meeting Facilitators) and Auxiliary Nurse Midwife in Bihar, India

By

Saiza Firoz Jivani

Bachelor of Dental Surgery

Rajiv Gandhi University of Health Sciences

2009

Thesis Committee Chair: Professor Reynaldo Martorell, PhD

A thesis submitted to the Faculty of the
Rollins School of Public Health of Emory University
in partial fulfillment of the requirements for the degree of
Master of Public Health
in Hubert Department of Global Health
2014

Acknowledgements

Many wonderful people graciously shared their knowledge and experience and supported me during the planning, execution and write-up of this study.

At Emory, I am extremely grateful for the patience and continued guidance provided by my adviser, Dr Reynaldo Martorell, and my thesis committee member, Dr Melissa Young. Thank you for providing me with the opportunity to conduct research in Bihar and tirelessly guiding me through the research process and thesis write-up with brilliant comments and suggestions.

I would also like to sincerely thank my fellow student and partner in this research study, Katrina Colbourne, for wonderful companionship and insight in conducting field research.

I am particularly grateful to Priya Kekre and Dr Pankaj Verma for welcoming me to CARE and helping me shape my design and implementation plan to conduct research in Bihar.

I would like to genuinely thank all CARE members of Gopalganj and Khagaria districts for their support in conducting interviews at all levels of program implementers. I am thankful to all Auxiliary Nurse Midwives, Front Line Workers and households for welcoming me to their communities and sharing experiences and stories without reservation.

Finally, special love and thanks to my family and husband, Yaseen Sayani, who listened intently and patiently to the latest developments in my study and writing process.

TABLE OF CONTENTS

ACRONYMS

ANM: Auxiliary Nurse Midwife

ASHA: Accredited Social Health Activist

AWC: Anganwadi Center

AWW: Anganwadi Worker

BC: Block Coordinator

CDPO: Child Development Project Officers

CF: Complementary feeding

FLW: Frontline Worker

HSC Facilitator: Health Sub Center Facilitator

HSC: Health Sub Center

ICDS: Integrated Child Development Services

IFHI: Integrated Family Health Initiative

IYCF: Infant and Young Child Feeding

LS: Lady Supervisor

ROO: Regional Outreach Officer

CHAPTER I – INTRODUCTION AND LITERATURE REVIEW

Rationale

Global Burden of Malnutrition

Child under nutrition is a global problem. Stunting, severe wasting, and intrauterine growth restriction together are responsible for 2·2 million deaths and 21% of disability-adjusted life-years (DALYs) for children younger than 5 years (Black et al., 2008). Micronutrient deficiencies like vitamin A and zinc account for 0.6 million and 0.4 million deaths respectively, resulting in a combined 9% of global childhood DALYs. Iron and iodine are together responsible for about 0.2% of global childhood DALYs. Furthermore, South Asia carries the highest burden of childhood under nutrition in the world with close to 50% of the world's undernourished children living in this region (Black et al., 2008).

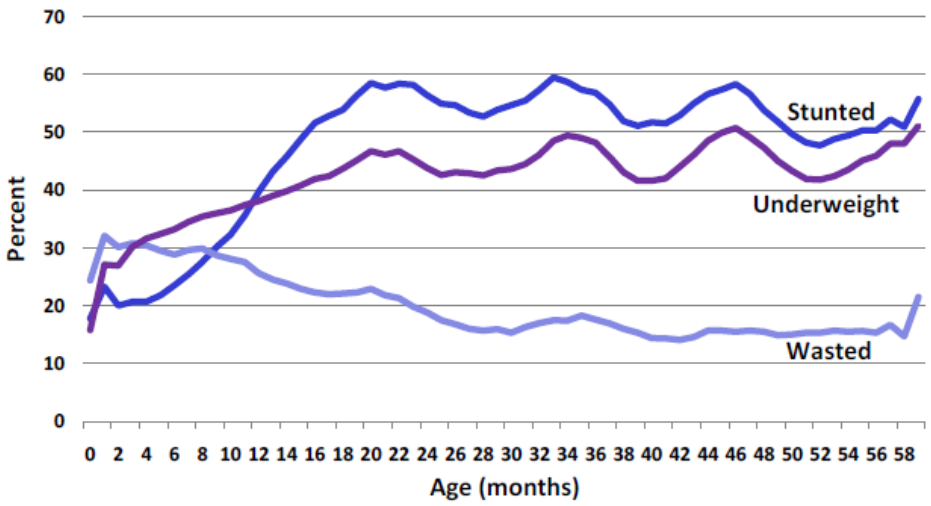
Problem of Malnutrition in India

Almost half the children in India under 5 years are stunted (too short for their age as per the WHO growth standards), which further implies that the child has been undernourished for a prolonged period of time (NFHS 2005-06 Report, India). One out of five children under 5 years in India are wasted (too thin for their height). Wasting is a current state of imbalance caused by failure to receive adequate nutrition and may be affected by recent episodes of diarrhea and other acute illnesses. Furthermore, 43% of children under 5 years are underweight for their age due to either chronic or acute under nutrition (IIPS, 2008). Additionally, in a more recent survey conducted in 2011 by the Naandi Foundation in India, 42% children under 5 years are reported underweight (The Hungama Survey Report, 2011).

Although these statistics cannot be compared due to variability in survey design and sample size, it is evident from the data that the prevalence of under nutrition in children under 5 years is still high.

The first two years of life, known as the *'window of opportunity'* are very important in the growth and development of a child (Seth & Garg, 2011). Age appropriate nutrition along with maintenance of hygiene and sanitation helps keep the child healthy and free from infections (Lim et al., 2012). It is evident from figure 1.1 that most cases of stunting underweight and wasting occur in the initial stages of life, that is from birth to when the child is 24 months.

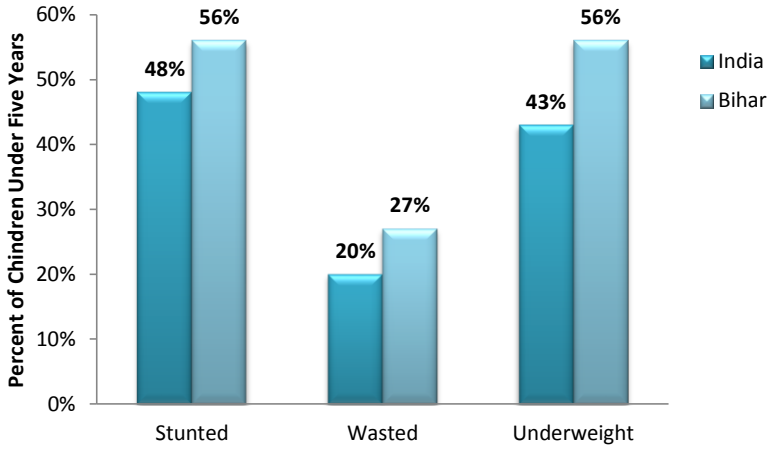
Figure 1.1: Stunting, wasting and underweight among children under 5 years by age (NFHS 2005-06 Report, India).



Problem of Malnutrition in Bihar

In Bihar, the percentage of children under 5 years who are undernourished is more than that in India. More than half of the children under 5 years (56%) are stunted. One in four children (27%) under 5 years are wasted, and 56% are underweight (IIPS, 2008).

Figure 1.2: Percentage of children under 5 years that are stunted, wasted and underweight in India and Bihar (IIPS, 2008).



Furthermore, around 80% of the children under 5 years are under nourished in Bihar and among children 0 to 3 years under nutrition has increased by 3% since 2002 (Sinha, 2012).

Additionally, anemia is another widespread health issues in India which can be caused due to nutritional deficiency of essential minerals and vitamins such as iron, as well as infectious diseases such as malaria and sickle cell disease. In young children, anemia can cause increased morbidity from infectious diseases that can cause impairments in coordination, cognitive performance, behavioral development, language development, and scholastic achievement (Vir & Kotecha, 2011)

In Bihar, 78% of children ages 6 months to 5 years and 67% of women are anemic. It is very likely for children of an anemic mother to suffer from anemia themselves ref. (IIPS, 2008).

Under nutrition is determined ultimately by social causes such as poverty, lack of education, lack of sanitation and poor access to quality health services (Black et al., 2008). Nonetheless, targeted and well-designed interventions can help preventing under nutrition. An example is the promotion of age appropriate complementary feeding when the child is 6 months (26 weeks) of age in addition to breast feeding (Bhutta et al., 2013). A significant association between recommended complementary feeding practices and height-for-age was reported by Ruel and Menon who analyzed data from the Demographic and Health Surveys (DHS) for 5 Latin American countries (Menon, 2013). DHS analysis has also indicated that increased dietary diversity was positively associated with height-for-age in 9 of 11 countries (reference). The relationship of feeding with stunting and underweight was analyzed for 14 poor countries by using 8 World Health Organization (WHO) feeding indicators and DHS data for children less than 24 months. The results indicated that the probability of being underweight and stunted can reduce by timely introduction of solid food, dietary diversity and iron rich foods (Marriott, White, Hadden, Davies, & Wallingford, 2012).

Purpose of the Study

Although improving complementary feeding amongst children between the ages of 6 months to 24 months is critical to improve child nutrition, progress has been slow, as it has emerged as one of the most challenging and complicated issues. Understanding perceptions of people related to complementary feeding and its importance across all program levels is very essential in order to study the gaps, barriers and opportunities that can help improve the program contents for future implementations.

Research Question

What are the gaps, barriers and opportunities related to infant and young child feeding content (IYCF) across CARE staff (regional outreach officers, block coordinators, health sub center meeting facilitators) and auxiliary nurse midwifes in Bihar, India?

Objectives

1. To understand the roles of Regional Outreach officer (ROO), Block Coordinator (BC), Health Sub center (HSC) meeting facilitators and Auxiliary Nurse Midwife (ANMs) in relation to infant and young child feeding (IYCF).

2. To examine the current perceptions and understanding of complementary feeding content among ROO, BC, HSC facilitators and ANMs.

3. Compare the perceived importance of IYCF recommendations across groups (ROO, BC, HSC facilitators, ANMs, Frontline workers and households) and how they prioritize it.

4. Identify the gaps, barriers and opportunities of complementary feeding across groups, to improve the IYCF program.

Behavior Change Communication Intervention to Improve IYCF

In a study conducted to help understand gaps, barriers and opportunities in program implementation to improve infant and young child feeding (IYCF) practices in Bangladesh, program impact pathway (PIP) analysis was used to study behavioral change communication interventions to understand the perspective of implementation staff on IYCF content as well as the IYCF practices at the household level (Avula et al., 2013). This was done using a mixed

methods approach, where the training materials were reviewed for the implementation staff, followed by assessing their knowledge about IYCF and observing their field work and how they communicate the messages to the beneficiaries. The results indicated that the program implementers (health volunteers and IYCF promoters) have sound knowledge of the IYCF counseling messages and they were the primary source of contact according to the beneficiaries. The PIP helped identify family support and availability of resources as the key facilitators to the program. However, key barriers to adopting and implementing IYCF recommended practices were 1) lack of time and resources, 2) perceived belief of mothers and family members that the child is small and cannot consume animal-source food. Furthermore, this research helped identify issues with roles of volunteer staff not receiving incentives to promote IYCF behavior change communication, thereby affecting their performance at work. Thus PIP helped in assessing the effective utilization of the program interventions, thereby recommending improvements for future programs. The present study uses in depth interviews to understand the knowledge of program implementers at different levels. However, it only uses qualitative approach, and not a mixed approach like used in PIP.

CARE IFHI Program Background

Since 2011, CARE India is working to support the Government of Bihar with funding from Bill and Melinda Gates foundation through the Integrated Family Health Initiative (IFHI) in eight districts in Bihar with plans to scale up statewide[1]. IFHI is working in different areas related to maternal and child health. The overall objective of IFHI is "to support the Government of Bihar

[1] CARE IFHI works in 8 districts of Bihar: Patna, Begusarai, Khagaria, Samatipur, Saharsa, Gopalganj, East Champaran, and West Champaran.

in its goal to improve the health and survival of families with pregnant women and women with children less than 2 years across the continuum of care" (CARE India, 2011).

One of the focus areas in child nutrition is complementary feeding practices for children of ages 6 to 24 months, in addition to continuing breast feeding.

Nutritional requirements of children 6 months and older are not fully met by breast milk alone. For a child 6 to 24 months of age, it is very crucial to transition from exclusive breast feeding to complementary feeding to meet nutritional requirements. Adequate nutrition is critical to child development. The period from birth to 2 years of age is important for optimal growth, health, and development (UNICEF, 2014). At this age, children are particularly vulnerable to growth retardation, micronutrient deficiencies, and common childhood illnesses such as diarrhea and acute respiratory infections (Laura E. Caulfield, 2006).

CARE is providing technical support to the government of Bihar by working with the Accredited Social Health Activists (ASHA workers), Anganwadi workers (AWW) and Auxiliary nurse midwives (ANM) who work at grass root levels directly in touch with the community.

HSC Meeting

HSC meetings are monthly meetings at the health sub center level. These meetings are held in more than 95% of the total 2,286 sub-centers (CARE India, 2012, November). The HSC meeting is a platform to get the health department and Integrated Child Development Services (ICDS) to work together. The ASHA come under the health department and AWW under ICDS. Both work to improve the health and nutrition of mothers' and children in the community.

The HSC meetings target approximately 30,000 FLWs and the meetings. Furthermore, the HSC meetings aim to build the capacity of the ANMs to facilitate the meetings in order to make it self-sustainable. Currently, these meetings are conducted by the HSC Facilitators that are CARE / IFHI employees as well as the ANMs. Topics like due lists preparation, home visit planner, birth preparedness, care of mother and the neonate in the first week , post-partum family planning, immediate new born care and complementary feeding have been discussed at these meetings (CARE India, 2012, November). The trainings are delivered using various resources including audio-visual aids as well as technical reference materials for the FLWs. Job aid kit and tools including ANM tools, survey register; home visit planner, home-visit kit, handheld devices and IPC cards are provided to the FLWs along with orientation on how to use it for effective message delivery at the community level.

CARE members, ANMs and FLWs Assigned Roles and Responsibilities

To understand the roles and responsibilities of each member in the system it is important to understand the organizational level at which each individual functions. The CARE members provide technical support and help build the capacity of the government workers like the ANMs, ASHAs and AWWs. The Regional Outreach Officer (ROO) formerly the District Outreach Officer oversees the work done at the regional and district level, the Block Coordinator at the block level and HSC Facilitator facilitates HSC meetings at the HSC level. The ANMs co-facilitate the HSC meetings along with the HSC Facilitators after receiving proper training at the ANM meetings by the CARE members. The ASHA and AWW work at the village level (anganwadi center).

Figure 3: Program level at which each member (CARE member, ANM and FLWs) work.

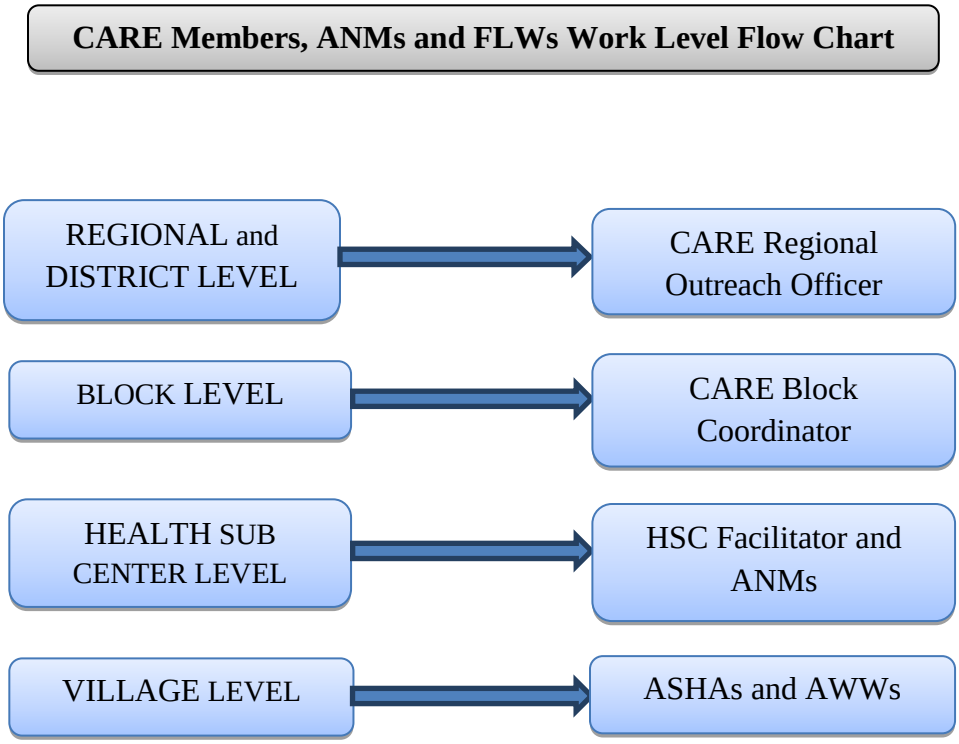


Table 1: Roles and Responsibilities of CARE Staff, ANMs and FLWs [1] (CARE India, 2011)

	Assigned Roles and Responsibilities
Regional Outreach Officer (ROO)	• The District Outreach Officers have been promoted to the position of Regional Outreach Officers in year 2013. • Develop micro plan in assigned block/s with support of BC and FLWs. • Support and supervise facilitators/ trainers and identify their training needs. • Ensure sub-center meetings as per micro-plan with good attendance. • Form Block Resource Team and coordinate on regular basis with them. • Facilitate sessions till BCs and other facilitators are prepared for taking this independently. • Ensure advance preparation of every meeting as per the checklist. • Monitor sub-center meetings and support facilitators for quality improvement. • Ensure BCs are providing support to FLWs in field as per meetings decision. • Provide only technical support to the newly assigned districts.
Block Coordinators (BC)	• Assist FLWs in preparing micro-plan for sub-center meetings and follow up with them for scheduled meeting. • Mobilize FLWs for good attendance in sub-center meetings. • Co-facilitate meetings with facilitator and other co-facilitators from block PHC/ICDS. • Depending on the capacity BC can also facilitate sub-center meetings as and when required. • Provide support to FLWs in field for their work as decided in sub-center meeting.
Health Sub-Center (HSC) Facilitators	• Co-facilitate monthly sub-center meetings with the corresponding ANMs in the assigned sub-centers, for review, planning and capacity building • Support the ANM in building FLW skills and capacities to perform key activities to enhance coverage of critical health services and bring about positive change in practices related to MCH, nutrition, immunization and family planning. These would include, but not be limited to helping FLWs in the following: ▪ Establishment of systematic enumeration and name-based tracking

[1] Table 1 refers to roles and responsibilities referenced from *Establishing sub-center level platform for effective health care service delivery through front line workers - A reference note for the initiative* (CARE India, 2011).

	of individual mothers and children ▪ Planning day to day work – especially home visits ▪ Effective use of tools and job aids to bring about behavior change • Provide individual handholding support to ASHA and AWW as per context and need basis • Build capacities of ANM to handle the responsibility of mentoring AWW and ASHA • Provide feedback on FLWs performance and share SHC specific issues and challenges with block level officials • Document sub center meeting experiences as prescribed • Extend similar support to other platforms for engaging government functionaries
Auxiliary Nurse Midwife (ANM)	• Gradually take responsibility of co-facilitation and facilitation of sub-center meetings • Mobilize AWWs. ASHAs and stakeholders for sub-center meetings • Helping facilitators and co-facilitators for the preparation of sub-center meetings • Help AWWs and ASHAs for planning and review of their work in sub-center meetings • Need based individual attention to AWWs and ASHAs for required hand holding • Follow up in the field for effective implementation of plan made in sub-center meetings
Anganwadi Worker (AWW)	• All AWWs of a sub-center should attend meetings with their registers and records • AWWs will bring stake holders and beneficiaries' information for case level discussions along with ASHA and ANM • Develop plan with ASHA for her catchment area and implement with set deliverables • Carry out her regular work with follow up in the area if ASHA is unavailable or absent
Accredited Social Health Activist (ASHA)	• All ASHAs should attend sub-center meetings planned for their respective sub-center. • Develop plan with AWWs and ANM for her catchment area and implement with set deliverables. • Bring beneficiaries and stakeholders' information to have case level discussions along with AWW and ANM. • ASHA will inform, interact, mobilize and facilitate improved access to preventive health care. • Provides basic curative care through her drug kit.

Significance of the Study

CARE has developed health sub center training materials that explain the concept of complementary feeding using different techniques. At the HSC meetings the FLWs are trained on ways to effectively conduct their work in the field and counsel the beneficiaries as per their needs. In spite of CARE's efforts to spread the importance of complementary feeding among the frontline workers and thus the families with children age 6 months to 24 months, there is minimal improvement seen to date in complementary feeding practices. This is evident from the Lot Quality Assurance Sampling (LQAS) survey which is used to continuously monitor CARE programs. According to LQAS survey conducted in 2603 households in CARE IFHI districts of Bihar, the number of mothers who received advice by any FLWs that their child should receive age appropriate frequency of complementary feeding after completion of 6 month has increased from 17% in round 2 in early 2013 to 21% in round 3 LQAS in mid-2013. However, in spite the increase in the percentage of FLWs counseling the households on age appropriate complementary feeding practices, the number of children ages 6 to 8 months. receiving cereal based complementary food decreased from 30% in round 2 to 27% in round 3 LQAS (CARE India, 2013).

This study will provide insights that will help inform CARE on the current perceptions, challenges and opportunities related to complementary feeding among CARE staff and the ANMs. Thus, it will help inform CARE programming through revisions in the HSC content and this in turn will improve the quality of training delivered to frontline workers and consequently, the quality of counseling messages delivered by the FLWs, thereby improving community complementary feeding practices.

CHAPTER II - METHODS

Study Design

This study is an in-depth analysis of qualitative data collected in Bihar, India during June 2013 to July 2013, to evaluate CARE's program by analyzing gaps, barriers and opportunities related to infant and young child feeding content (IYCF) across CARE staff (regional outreach officers, block coordinators, HSC meeting facilitators) and auxiliary nurse midwifes in Bihar, India. The study consisted of 44 in-depth interviews, 11 in each of the 4 blocks. In-depth interviews were used in this study to gain individual perspectives of IYCF content and community practices related to complementary feeding in Bihar, India.

Timeline

Table 3.1: Research timeline - June 2013 to May 2014.

	Months (2013 – 2014)				
	June	July	August	Sept – May	May
Design, translate into Hindi, and pilot interview guides with help from CARE staff	X				
Travel to CARE focus districts	X	X			
Conduct interviews and do interview debriefs	X	X			
Presentation of Preliminary findings to CARE team		X			
Transcription / Translation into English		X	X	X	
Data Analysis				X	
Report findings of the study to CARE, India for future program improvements; thesis					X

Selection of Research Sites

Sites to conduct the qualitative in-depth interviews were selected based on the analysis of CARE Round 2 monitoring data - Lot Quality Assurance Sampling (LQAS) survey conducted in 2013, to identify high and low performing districts and blocks within the districts, where Integrated Family Health Initiative (IFHI) interventions have been implemented, in terms of complementary feeding in Bihar, India. Two "vital indicators" were used to classify the blocks as high and low performing blocks.

Table 3.2: LQAS Round 2 vital indicators focused on families with children in 6-8 months age group, used to classify the blocks as high and low performing for site selection (CARE India, 2013).

Vital Indicators	Description
Community Practices	# of children 6-8 months receiving any cereal based complementary food
FLW practices	# of mothers with a child 6-8 months who received advice by any Front line workers (FLWs) that their child should receive age appropriate frequency of complementary feeding after completion of 6 months

Districts for the study were purposefully identified based on the district level estimates from round 2 LQAS data. There were two major criteria in selecting the districts; 1) select one district that was high performing and one that was low performing based on vital indicators mentioned in Table 3.2, and 2) both districts should have at least one high and one low performing block. This would help identify reasons for successes in the high performing areas, and also identify a good range of gaps, barriers and opportunities in both, high and low performing areas.

Gopalganj was selected as a high performing district with 47% of 266 households responded that their child is receiving cereal based semi-solid food, and Khagaria as the low performing district with 14% of 133 households responded that their child is receiving cereal based semi-solid food (CARE India, 2013). When looking at the number of mothers who received advice by FLWs on age appropriate frequency of complementary feeding, the district estimates for Gopalganj and Khagaria were very close at 19.6% and 25.6% respectively (CARE India, 2013). Within the districts using the same vital indicators as in table 3.2, high and low performing blocks in each district were identified. In Gopalganj, Hathua was identified as high performing and Barauli as low performing block. In Khagaria, Parbatta was identified as high performing and Alouli as low performing block. Table 3.3 shows the block level LQAS findings for the two districts selected.

Table 3.3: Round 2 LQAS Data for Selected Blocks.

Total number of households surveyed in each block = 19.

Indicator	Gopalganj District (High)		Khagaria District (Low)	
	Hathua Block (High)	Barauli Block (Low)	Parbatta Block (High)	Alouli Block (Low)
# of children receiving any cereal based complementary food	14	1	6	1
# of mothers received advice by any Front line workers (FLWs) that their child should receive age appropriate frequency of complementary feeding after completion of 6 months	11	1	4	0

Study Population and Sample Size

The populations of interest were the district and block level CARE members, ANMs, FLWs and beneficiaries. As CARE is trying to strengthen the capacities of the ANMs to become

independent and conduct HSC trainings for the FLWs, they were also interviewed to understand their perceptive about complementary feeding. Furthermore to compare the perceived importance of IYCF recommendations across groups (ROO, BC, HSC facilitators, ANMs, Frontline workers and households) and how they prioritize it, interviews were also conducted with AWWs, ASHA workers and households with at least one child between the ages of 6-23 months, as this is the age when complementary feeding must have initiated.

The study included 44 in-depth interviews in two districts of Bihar. Interviews were conducted in 2 blocks per district. In each block 11 individuals were interviewed including CARE staff, ANMs, FLWs and households. Table 3.4 shows the breakdown of total number of interviews conducted.

Table 3.4: Total number of interviews conducted for the study (n=44)

Items	**Khagaria District**		**Gopalganj District**		**Total Interviews**
	Parbatta Block	**Alouli Block**	**Hathua Block**	**Barauli Block**	
# of ROO interviews	1	1	1	1	4
# of BC interviews	1	1	1	1	4
# of HSC facilitator interviews	1	1	1	1	4
# of ANM interviews	1	1	1	1	4
# of AWW interviews	2	2	2	2	8
# of ASHA interviews	2	2	2	2	8
# of Household interviews	3	3	3	3	12
Total number of interviews	11	11	11	11	**44**

For the purpose of this study, interviews from only one district were analyzed for Objective 1, 2 and 3. This was because the answers attained a level of saturation as they were being repeated and only served the purpose to confirm respondents emerging perceptions and understanding related to IYCF. Also, in the data collected in this study, no differences were observed between

the high and low performing districts and blocks. However, for objective 4, when identifying gaps, barriers and opportunities of complementary feeding across groups, to improve IYCF program, CARE members and ANMs interviews from both the district were included in the analysis as some respondents described unique challenges and solutions to improve the HSC meetings. Table 3.5 and 3.6 shows the breakdown of the data used for objectives 1, 2, 3 and objective4 respectively.

Table 3.5: Sample Size Objective 1, 2 and 3 (Objective 1 and 2: n=8; Objective 3: n=22)

Item	**Khagaria District**		**Interviews per District**	**Interviews per Objective**	
	Parbatta Block	**Alouli Block**			
# of RO-O interviews	1	1	2	**Objective 1 & 2**	**Objective 3**
# of BC interviews	1	1	2		
# of HSC facilitator interviews	1	1	2		
# of ANM interviews	1	1	2		
# of AWW interviews	2	2	4		
# of ASHA interviews	2	2	4		
# of Household interviews	3	3	6		
Total number of interviews	11	11	22	**8**	**22**

Table 3.6: Sample Size Objective 4 (n=16)

Item	**Khagaria District**		**Gopalganj District**		**Interviews per District**
	Parbatta Block	**Alouli Block**	**Hathua Block**	**Barauli Block**	
# of ROO interviews	1	1	1	1	4
# of BC interviews	1	1	1	1	4
# of HSC facilitators interviews	1	1	1	1	4
# of ANM interviews	1	1	1	1	4
Total number of interviews	4	4	4	4	**16**

Design Research Tools

In-depth interview guides to assess perceptions, understanding and utilization of complementary feeding content, as well as experiences with and key challenges and opportunities of IYCF HSC roll out with ROO, BC, HSC Facilitator and ANM were developed in collaboration with CARE and Emory team. The IDI guides were translated in Hindi, as it was the language understood by the people in Bihar among other local languages like Bhojpuri, Theti, Maithili, etc. The IDI guides were pilot tested in a village in Patna district. Based on the pilot interviews, the guides were revised to better meet the overarching goal. IDI guides and interview strategy were revised and modified throughout the field work as and when needed. This is because qualitative analysis is an iterative process where analysis takes place throughout the research in a circular manner. At every step, data collection and analysis are interlinked, thus making analysis a continuous process.

Identification and Recruitment of Participants

Participants were recruited from 2 blocks each in Gopalganj and Khagaria. In Parbhatta block, ROO, BC and HSC Facilitator were interviewed first. The BC was used as the gatekeeper to select an average performing health sub-center (HSC) to conduct interviews with the ANMs and FLWs. The FLWs helped to select households who had children between 6-23 months.

The following are the lessons learned from the Parbatta block field visit:

- Top down approach was applied to select and interview the participants. The block coordinators were used as gatekeepers to the auxiliary nurse midwives and frontline workers. As the block coordinators were already interviewed, they had the information on the interview content. This may have led to selection bias by selecting respondents that

could answer the questions well. There could also be a possibility to have shared the types of questions asked during the interview with the auxiliary nurse midwives and frontline workers.

- Frontline worker interviews were completed before going to the households. This may have given frontline workers time to share the information with the household members, and select households that could answer the interview questions well.

To resolve these issues and minimize biases, the interview strategy was modified was modified to bottom-up approach for the other blocks. For Alouli, Hathua and Barauli blocks, proper coordination was established with the Regional Manager and the Regional Outreach officer. The research needs and importance was explained with emphasis on the cooperation by the CARE team in order to effectively proceed with the research ethically and minimize biases.

Average performing health sub centers was selected using a predetermined number to count down from the list of health sub centers provided by the block coordinator. The ANMs per HSC and FLWs in each village were selected in a similar way. The home visit planner is available with the FLWs and has information of households with children 6 months to 24 months. The HVP was used to select the households to be interviewed using a predetermined number to count down the list. Thus, using a bottom up approach, HH interviews were conducted first, followed by FLW and ANM interviews, which were followed by HSC facilitators, BC and ROO interviews.

Informed Consent and IRB Approval

Informed consent was obtained verbally before each interview. A statement describing the purpose, risks, and benefits of the interview was read to participants and verbal consent was

obtained. Verbal consent was also obtained for audio recording of the interviews. The in depth interviews were recorded to ensure that all of the information that the participants provided was captured.

Institutional Review Board (IRB) approval for this study was obtained and exempted by Emory University in Atlanta, Georgia as this study does not constitute human subject research according to the definition used by the IRB.

Data Analysis

The audio recordings were transcribed verbatim, and translated into English mostly by the resources provided by CARE in Bihar. A few interviews were transcribed by the research team and directly analyzed in Hindi. These interviews were analyzed to identify major emerging themes. MaxQDA qualitative analysis software was used to analyze the data. The interviews were coded and memos were written. A thick description of the data was developed around codes central to the research. Thematic analysis was used to explore themes emerging from the data by comparing and contrasting new themes.

CHAPTER III – RESULTS

This section consists of findings related to each objective in this paper. The first objective's aim is to understand roles and responsibilities of CARE staff and ANMs. The second objective deals with understanding CARE staff and ANMs perspectives about CARE interventions to improve child nutrition. The third objective focuses on the perceived importance of complementary feeding (CF) recommendations while the fourth objective addresses gaps/ barriers and solutions to effectively deliver counseling and other interventions at each level.

OBJECTIVE 1

To understand the roles of Regional Outreach Officer (ROO), Block Coordinator (BC), Health Sub Center (HSC) Meeting Facilitators and Auxiliary Nurse Midwife (ANMs) in relation to Infant and Young Child Feeding (IYCF).

Roles and Responsibilities

Regional Outreach Officer (ROO)

The *Integrated Family Health Initia*tive (IFHI) program started its preliminary work in eight districts of Bihar and is now expanding its work and intervention to other districts. The District Outreach Officers have been promoted to the position of Regional Outreach Officers (ROO) in 2013. According to the ROOs, their responsibilities are now at district level instead of just block level. ROOs oversee outreach work in the field like HSC meetings, and indirectly oversee work done by BCs and HSC facilitators. They participate as well as provide technical support in HSC

meetings and other meetings involving ANMs, lady supervisors (LS), AWWs and ASHA Divas. One ROO mentioned that in the newly assigned districts, he has to give 20% of his time. Of the remaining time, he has to give 20% to KalaAzar and 60% to the original block. They select ANMs, block health manager, block community mobilizer or others from their respective blocks to serve as role models. They provide training and technical support to these selected members within their district to build their capacities. This in turn helps the district to become independent and self-sustaining as its staff can execute their work without any external help and support.

In the districts that were previously assigned, the primary focus areas were maternal and child health, nutrition, immunization, family planning and KalaAzar. The target population for HSC outreach work consists of pregnant women and women with children less than 24 months.

In the area of child nutrition, one ROO mentioned that he occasionally goes for home visits to monitor ASHA's and AWWs' work in the field. He accompanies them when conducting home visits and observes them counseling and makes suggestions if necessary.

> *"Sometimes we go to the field and whoever it may be ASHA or AWW, we ask them to come with us for home visit. We tell them to counsel the beneficiaries on nutrition and cover up for what they have missed".*
>
> *"Also try going for home visits and ask (the beneficiaries) if the FLWs and ANMs come and visit them, and if yes, what do they tell them (the beneficiaries) during the home visits".*

They also attend meetings with ASHA and AWW to get feedback on work done in the field, so that they can provide technical support accordingly.

Furthermore, ROOs attend government programs along with the BC's and also coordinate with the government.

> "*Provide them (government) with help in planning and get involved in programs where they are training others and provide them support in what they are doing and provide solution to them and mobilize them and indirectly get work done."*

Another ROO mentioned that he helps build the capacity of the block coordinators and provides government advocacy.

> *"Support government at the district level and at the HSC level helps build capacity of ANM, facilitator and external facilitator to conduct HSC meetings*."

Block Coordinator (BC)

BCs are a link between the FLWs at the block level and the CARE team at the district level. The BCs request resources like bowl and spoon from the district teams that are required by the FLWs at the HSC level. When FLWs come across challenging situations that they cannot resolve in the field, they seek help from BCs. If the BCs cannot resolve the issues, they seek help from the district CARE team.

The primary focus areas identified by the BCs were to reduce maternal and child mortality rates, improve immunization, family planning, and eliminate child under nutrition. BCs monitor work done by FLWs during HSC meetings and also help them understand concepts to execute their work efficiently in the field. They help in conducting monthly HSC meetings by coordinating work associated with ANMs, health department and ICDS. They also motivate FLWs to fill in the due list and home visit planner (HVP).

The BC passes on information on various activities and programs to ASHAs via the ASHA facilitator. They also conduct Lot Quality Assurance Sampling (LQAS) survey in their area to monitor the IFHI program outcomes.

The BCs, along with Medical Officer In-Charge (MOIC), discuss the HSC contents with the ANMs at the ANM meeting.

BCs also observe ANM's performance when they are facilitating these HSC meetings, and provide them feedback and suggestions for future improvements. Occasionally when required, they also facilitate HSC meetings. One of the BCs emphasized on the importance of training ANMs and FLWs.

> "*Our role is to train the FLWs (ASHA, AWW) and ANM who work in the field and are the only means through which we can pass the messages effectively to the communities. So if they are not performing well, then we train them on how to do home visits, what messages should they counsel and when, etc."*

Additionally, they describe their role as helping to improve the nutritional status of children in the community. They evaluate FLWs work by conducting random home visits to assess their performance, and make sure that they are conducting frequent home visits and communicating the right information to the beneficiaries. If they feel necessary, they sometimes tag along with FLWs for the home visits to motivate and convince the beneficiaries. This happens mostly when the beneficiaries are uncooperative and fail to understand the importance of the FLW's messages. They also motivate FLWs to give complementary feeding demonstrations during home visits.

One of the BCs mentioned that it is essential to explain the FLWs the importance of nutrition, so they understand the concept and the need to improve child nutrition.

> "*...Without having the knowledge of its importance she (FLWs) won't be able to work in the field effectively. They should know the status and condition of nutrition in her area and how to improve it."*

Another BC helped conduct programs and activities at the community level by involving the community members in role plays and thus strengthening their capacities.

> *"In _____I initiated nukkad-natak (role plays) in a village. This was a whole day program where we did role plays taking the people of the same village. And the whole day we had role plays about child nutrition, emergency birth preparedness and all these things, and we got good participation. The result in that particular area is very nice. This time when I went for the survey (LQAS), people of that particular area had started feeding their child in the same way as shown to them.*
>
> *So this was shown in different ways making it visual, thereby having more impact".*

Health Sub Center (HSC) Facilitator

The HSC facilitator facilitates HSC meetings in association with ANMs, ASHAs and AWWs. At primary health center (PHC) level their work is supervised by the BC. They receive information about HSC meetings and their work in CARE meetings at the district CARE office. They provide FLWs with ideas to improve their work in the field. For example, assists FLWs with different ways to conduct home visits, provide them with a home visit planner and explain how to use it to conduct systematic home visits. HSC Facilitators evaluate FLWs work by checking all registers that they have to complete, and assists them if they need help. They also assess FLWs work in the field on the day of HSC meetings and motivate them to conduct home visits if they do not do so. One of the HSC Facilitator said:

"Whatever knowledge I get, I share it with the FLWs and explain them, so that they can explain it well to the beneficiaries".

Additionally they train ANMs to lead HSC meetings independently. The HSC facilitators select ANMs with good communication skills and provide them with HSC content during the ANM meetings. In most places the ANMs have already started leading the HSC meetings. The HSC facilitators or the BCs attend and observe the meetings facilitated by the ANMs and provide inputs on how to improve. Furthermore, they also help build capacities and motivate those ANMs who are not very confident about facilitating the trainings.

HSC Facilitators also motivate the FLWs when they are faced with a challenging situation in the field, and make note of any un-resolvable challenges/ difficulties faced by the FLWs and pass the information on to BC, so that it can be solved by higher authorities.

Auxiliary Nurse Midwife (ANM)

Depending on their grade, ANMs' roles vary from managing work at the hospital, HSC center and Village Health Sanitation and Nutrition Day (VHSND). Both ANMs interviewed in this district facilitated HSC meetings under the supervision of the BC or the HSC Facilitator.

They conduct home visits when they have time or when there is need. One of the ANMs accompanies the ASHA to nearby areas if the ASHAs come across any challenging situations. They supervise FLWs work by checking HVP during monthly HSC meetings and VHSND. They also perform routine immunization and counsel beneficiaries as per their needs. Additionally, they counsel mothers with children ages 6 to 24 months on recommended complementary feeding practices.

As part of the VHNSD, one of the ANMs is allotted with work related to arranging garbage bins as well as creating a concrete area around hand pumps and proper drainage.

Also, they manage difficult cases in the field and if they are not able to convince the family, then they pass the information on to higher officials like Child Development Project Officers (CDPOs).

OBJECTIVE 2

Objective 2 examines the current perceptions and understanding of complementary feeding content among ROOs, BCs, HSC Facilitators and ANMs. The respondents discussed complementary feeding content in the context of four key program areas that include HSC meetings, complementary feeding counseling, and use of job aids.

HSC Meetings

Regional Outreach Officer

The ROOs gave an overall viewpoint of the topics covered at the HSC meetings. According to one ROO, every month there are discussions on different topics related to maternal and child health, like birth preparedness, family planning, breast feeding, complementary feeding, immunization and KalaAzar. The main target population consists of pregnant women and children ages 0 to 24 months.

One ROO mentioned the benefits of having meetings at the HSC level:

> "… *as the meeting is done at the HSC level, the number of people is less and thus the participants can share their ideas and thoughts well with each other and learn from each other and proper focus can be given to each participant*."

The ROO also mentioned that the FLWs also feel that apart from HSC meetings, there are no other meetings at the HSC level and that these meetings help improve their knowledge.
When asked about IFHI intervention related to child nutrition, the ROO mentioned about job aids kits that are provided to the FLWs to assists them to effectively conduct home visits and counsel on different topics covered at the meetings. The ROO first mentioned about family planning counseling items in the kit like Mala D, uterus model, copper-T and then talked about the bowl and spoon that are used to counsel on complementary feeding.

According to the ROO, there are two topics discussed at the HSC meetings related to child nutrition; breast feeding and complementary feeding. While breast feeding has been a part of discussions at HSC meetings for a long time, discussions on complementary feeding have only recently started. While explaining the reason for starting discussions about complementary feeding at the HSC meetings, the ROO explained that as children grow, their nutritional requirements grow with them. After 6 months as mothers' milk is not sufficient to provide all the nutrients to the child's growing body, and introduction of complementary feeding in the child's diet becomes essential for proper growth and development. The ROO identified the bowl and spoon as being effective counseling tools to pass complementary feeding messages to the beneficiaries, as their use ensures that the child is eating age-appropriate amounts of food. Also he talked about weak new born care and kangaroo mother care when it comes to child nutrition. In order to identify weak new born children he mentioned three indicators: 1) if the child is born pre mature that is at 8 months or earlier, 2) if the child is not breast feeding properly, and 3) if the child weighs less than 2 kilograms (less than 4.4 pounds) at birth.

At the HSC meetings, usually all topics are covered. Additionally, topics from previous meeting are reviewed. However, there may be a few meetings that are conducted by ANMs where all content is not covered. The ROO explained that this usually occurs when there is no one from CARE *(ROO or BC)* or the government sector to supervise the ANM meetings, and that the ANMs try to complete the meetings in haste.

Block Coordinator

One BC highlighted the importance of HSC meetings by saying,

> *"HSC meetings are the main pillar of IFHI program".*

After initiation of HSC meetings, the BC has observed noticeable progress in areas where meetings have been conducted. There has been increase in awareness as well as an increase in adoption of new techniques and processes that were discussed in the meetings. *(No specific examples where noted where improvement occurred).*

Various tools are used to conduct the HSC meetings in an effective way. One BC mentioned that they make use of both auditory and visual modes for explaining the content to the FLWs along with oral discussions. Visual aids like a mobile projector, power point slides and flip charts are used. The BC also requests ANMs to arrange for a mother with a child 6 months of age to participate in a live demonstration of complementary feeding.

BCs coordinate HSC meetings and sometimes also lead them when required. They observe the ANMs performance when ANMs are facilitating the meetings. According to the BCs, different topics related to maternal and child mortality, home and hospital delivery, emergency birth preparedness, immunization, undernourished children and complementary feeding are discussed

every month at the HSC meetings. They also discuss ways in which these health outcomes can be improved in the community.

When probed about other IFHI interventions related to child nutrition, one BC said,

> *"In relation to child nutrition, FLWs are explained things to keep in mind when taking care of the child, and ways to identify an under nourished child (a child who appears to be weak). There is a standard that we follow. In this way they (FLWs) have to see. In this way you (FLWs) have to tell the people how to feed the child and give live demonstration. The FLWs are provided with tools (bowl and spoon) to give live demonstration."*

Another BC talked about topics covered in the last two months and mentioned that complementary feeding was not discussed in detail in the previous months. However, more recently, all topics from the previous 2 to 3 months, including complementary feeding, are reviewed first. Additionally, the FLWs have to fill a form with questions related to complementary feeding practices.

HSC Facilitator

The HSC facilitators conduct HSC meetings at centers where the ANM is still undergoing training. Both HSC facilitators who were interviewed were conducting HSC meetings.

One HSC facilitator feels these meetings are very important as there are no other platforms where ASHAs and AWWs can come together in small groups, understand concepts, as well as get their questions answered.

The HSC facilitator feels that the FLWs are satisfied by the HSC trainings as it is increasing their knowledge and understanding about concepts, which in turn is helping them ease their work in the field.

When the HSC facilitators were asked about the topics covered at the meetings, one of them mentioned topics like pre and post natal care, and home visits for pre and post natal care, weak newborn care, breast feeding and family planning, complementary feeding and emergency birth preparedness are discussed at the meetings. He felt family planning was a very important topic and mentioned that it is discussed very often. He also explained in detail about each topic. The other HSC facilitator also provided detailed explanation of the topics covered at the HSC meetings. He talked in detail about pre and post-natal care, emergency birth preparedness and family planning, and just mentioned about other topics covered that included nutrition. On further probing to understand if nutrition was discussed in detail, the HSC mentioned about topics related to nutrition and complementary feeding. He emphasized to give complementary feeding for under nourished children and said:

> "*In terms of nutrition, give them information on how to identify it (under nourished child). If the child becomes undernourished, how will we understand, and to save him, we tell about complementary feeding, that it should be initiated after 6 months. Give a lot of emphasis on this."*

One HSC facilitator took some time to recollect that complementary feeding content was discussed at the HSC meetings in December, 2012 or January 2013. That is 6 months prior to the interview.

The HSC facilitators provide FLWs with various complementary feeding recommendations that need to be counseled to the beneficiaries during home visits. One HSC facilitator mentioned about complementary feeding initiation that:

"After 6 months complementary feeding can be given to the child".

In addition the HSC facilitators also talked about age appropriate quantity and frequency, semi-solid consistency of the food, cleanliness when dealing with food and diversity of food that needs to be given to children. One HSC facilitator also mentioned about the use of bowl and spoon during home visits to demonstrate complementary feeding quantity to the beneficiaries.

HSC facilitator from one block makes use of various methods like discussions, mobile projectors, power point presentations, and flip charts, draws designs, mobile kunji and demonstrates how to hold the card *(mobile kunji)* and how to show the beneficiaries. Additionally, he does activities, like role plays for pre-natal care, where he asks FLWs to talk to the participants the way they would talk to the beneficiaries. This would help the FLWs be better prepared for difficult situations that may arise in the field.

Another HSC facilitator mentioned that he makes use of mobile phones to demonstrate kangaroo mother care and breastfeeding to the FLWs. He also uses videos, power point presentations, flip charts and black boards to explain how to fill in the HVP. This HSC facilitator does not organize role plays when conducting the HSC meetings.

Auxiliary Nurse Midwife

ANMs co-facilitate HSC meetings and are an important point of contact for the FLWs when they are faced with challenging situation in the field. When facilitating HSC meetings, the ANMs deliver content based on the topics given to them. The ANM used the term "CARE India"

analogous to “HSC meetings”. Various topics like eclampsia, complementary feeding, family planning, etc. were discussed during the meetings. When being probed on whether the ANM has given FLWs training on child nutrition, one ANM said:

> *“I have not given them any training besides CARE India. I tell them whatever I have learned from CARE India like green vegetables should be given to child, balanced diet should be given for protein supplement of child. I make them understand and I make mother to understand. There is no special meeting for ASHA and AWW related to this.”*

Complementary Feeding Counseling

Complementary feeding counseling is provided to the beneficiaries by the ANMs and the FLWs. The ROOs, BCs and HSC facilitators reiterate these counseling messages when they go for home visits.

Regional Outreach Officer

One ROO discussed complementary feeding counseling messages in the interviews analyzed. He mentioned:

> *“…a child should be fed a minimum of 100 ml. At the age of 9 months the child should be fed at least two bowls a day. And from 9 to 11 months the child should be fed 3 bowls a day. In this way to increase the quantity”.*

Block Coordinator

When explaining about complementary feeding content covered at the HSC meetings, one BC mentioned that the FLWs provide counseling messages on recommended complementary feeding practices to the beneficiaries. The FLWs demonstrate food preparation, feeding the child and

explain to the beneficiaries to practice the same. The ANMs provide complementary feeding counseling during routine immunization day. When the ANM notices a week child she counsels the mothers to feed the child well. Another BC emphasizes that the FLWs should be made aware of the importance of job aids like the bowl and spoon. This will help enhance FLWs knowledge when counseling on complementary feeding practices to the beneficiaries.

> *"..So we have told all the FLWs that they have to do home visit before the child completes 6 months and tell the families about the child that after the child completes 6 months to feed the child whatever is being cooked at home".*
>
> *One BC mentioned that he explained the FLW ways to counsel the mother, to feed the child two bowls of food in a day but in small proportions He said, "…little little like few spoons at a time…". "The child needs to get used to eating and only if we feed the child will the child start eating 2 bowls till he turns 8 months".*

HSC Facilitator

The HSC facilitator talked about complementary feeding recommendations that are used by the FLWs when counseling on complementary feeding practices. These recommendations are provided to the FLWs during the HSC meetings.

In relation to complementary feeding initiation, the FCs said,

> *"Complementary feeding can be initiated after 6 months".*
>
> *"…In the beginning only dal (lentil) water should be given to the child, but not for a long time. Slowly slowly feed the child proper meal. The food should be semi-solid…"*
>
> *"3 things that should not be given to the child: rice juice (maad), tea (chai) and dal water (Dal ka paani). But in the beginning we can start with this as the child is small, for the*

child to get used to food. But should not make it a habit; give for 2 days, as it's not meant for the child. Feed the child semi-solid food and then slowly give roti..."

Another HSC facilitator mentioned that a child aged 6 to 24 months should be fed two bowls of 100ml, which is 200ml of food in a day.

Information is also provided on diversity which includes all types of foods cooked at home, use of the bowl and spoon when feeding the child age appropriate quantity and frequency of food, and cleanliness when handling food. The FLWs are also informed to make use of the bowl and spoon during home visits to demonstrate quantity of food to be fed to the child. He mentioned that the FLWs fill in water in the bowl and then demonstrate to the mother how much is 100 ml in the bowl/vessel they have in the house, so that they (beneficiaries) get an estimate of how much they should feed their child.

Another HSC facilitator provided a reason to start complementary feeding explaining that complementary feeding should be initiated after 6 months as until 6 months breast milk production keeps increasing and is enough for the child. However, this increase in breast milk production stops after 6 months. But since the child still keeps growing, breast milk is no longer sufficient for the child to get proper nutrition, and thus complementary feeding should be initiated.

According to the HSC facilitator, ASHAs always counsel on complementary feeding. AWW too counsel, but not as much as the ASHAs. Also, ANMs sometimes conduct home visits to counsel on complementary feeding as needed.

Auxiliary Nurse Midwife

The ANMs provide complementary feeding counseling to the beneficiaries based on the community/caste they belong to. For families who are lower caste and cannot afford to buy food from outside, the ANMs inform them to feed the child whatever is cooked at home. In this way the children will get greater variety of food in their diet. The ANM identifies weak children and counsels the mothers on complementary feeding and provides them information about child nutrition. For children less than 2 years, the ANM counsels beneficiaries on breast feeding and complementary feeding. With respect to complementary feeding, she counsels the beneficiaries on timely initiation of complementary feeding after the child turns 6 months of age. She also stresses the importance of feeding age appropriate quantity by explaining to the mothers that since the child is growing, he will need more food. She mentioned the use of bowl and spoon to feed the child and encourages the FLWs to carry the bowl and spoon and demonstrate complementary feeding quantity when conducting home visits. She also explains about the consistency of the food by comparing the recommended consistency to "khichadi" *(semi solid mixture of rice and lentils).*

One ANM mentioned that complementary feeding should be initiated after 6 months. The child should be given semi-solid food like khichadi. The child should be fed half bowl (the ANM points to the line on the bowl that is 100 ml) 3 to 4 times a day.

Another ANM mentioned:

> *"…If the child is of age between 6 months to 8 months then child should be given at least 200gm of food. A bowl should be measured and kept for child and mother should feed child with that bowl one or two times. Even though children of this age not eat much but*

> *still mother should make the child eat food! Anyhow child has to be fed food. Apart from food if child wants then mother can also give mother's milk. It is not like you have to cook special food for child whatever you eat at home you should feed to your child but you should mash it first…"*

Through a role play between the interviewer and ANM, the ANM mentioned how she explains FLWs on complementary feeding recommendation to counsel to the beneficiaries like complementary feeding initiation and consistency, age appropriate quantity which can be measured by feeding the child in a bowl, feeding frequency, diversity of food and cleanliness.

In addition, the ANM counsels the mothers on responsive feeding. She observes ways in which mothers feed their children and then guides them accordingly. She demonstrates different ways in which a mother can encourage the child to eat, by talking, narrating stores, singing and being patient when feeding the child. Another ANM said,

> "*I also tell them about the diet of child, how to take care of child, to wash hands before feeding to child. I also tell them to make the child eat in front of her because they serve food to child and they leave and go out because of which houseflies sits over the food. I tell them houseflies should not sit on the food. I tell them about this. I also tell them to keep your child neat and clean".*

If the women cannot use soap before handling food products, she recommends using ash as in her opinion it is an antiseptic.

To summarize, Table 3.1 compares responses of ROOs, BCs, HSC facilitators and ANMs on complementary feeding initiation, quantity and frequency.

Table 3.1: Summary of Responses of ROOs, BCs, HSC Facilitators and ANMs on Age-Appropriate Quantity and Frequency of Complementary Feeding[1]

Respondents	Age	Quantity	Frequency
ROO	At initiation	At least 100 ml / day	
	9 months	At least 2 bowls / day	
	9 to 11 months	3 bowls / day	
BC	> 6 months	2 bowls / day	Few spoons at a time, multiple times a day
HSC Facilitator	6 to 24 months	2 bowls / day or 200 ml /day	
ANM	> 6 months	1 bowl / day or 100 ml / day	3 to 4 times a day
	6 to 8 months	200 grams / day	1 to 2 times a day

Job Aid Kit

The job aid kit is provided to the FLWs at the HSC meetings. It consists of different tools that assist the FLWs to counsel on family planning, complementary feeding, etc. One BC mentioned that approximately 2 to 4 FLWs including the ones newly appointed have not received the kit yet, but they all have the knowledge and understanding of the importance of each tool, and also know ways in which they can use these tools.

[1] The IYCF recommendations are as follows:

- Begin to introduce cereal-based semi-solid foods after 6 months
- Feed age-appropriate quantity and frequency to the child
- Feed thick semi-solid food
- Wash your hands/child's hands before preparing food and serving food to the child
- Feed a variety of foods to the child using different ingredients available at home – cereals, vegetables, meat, dairy, fats/oils fruits, legumes etc.
- Engage in responsive feeding by being sensitive to hunger cues, feeding slowly and patiently, encouraging the child to eat, minimizing distractions, and making eye contact.

Bowl and Spoon (Katori Chamach)

Regional Outreach Officer

The FLWs are provided with a bowl and spoon that is included in the job aid kit. The bowl and spoon are tools that help the FLWs to counsel complementary feeding messages to the beneficiaries who have children of ages 6 months to 24 months.

Most families with children 6 to 24 months do not know the quantity of food that should be provided to the child as per the child's age. Also, since they have a tendency to feed the child in the same vessel as theirs as they feed the child only when they themselves eat. They do not know of any means to measure the quantity of the food they feed the child, and end up either over feeding the child or, more often, under feeding the child. To cover up this gap in knowledge a new topic was added in the HSC meetings on complementary feeding. The bowl and the spoon were provided to all FLWs in the community. The FLWs make use of the bowl and spoon to demonstrate age appropriate quantity and frequency of food for the child.

The ROO mentions that the FLWs are well equipped and confident to conduct home visits and counsel on complementary feeding.

Block Coordinator

Similar to the ROOs, the BCs mentioned that the bowl and spoon are made available in the job aid kit and used by FLWs to counsel on complementary feeding. One BC mentions that the bowl and spoon is used by both ASHA and AWW and another BC mentions its use only by the AWW. According to one BC, the bowl helps demonstrate complementary feeding as well as helps in feeding age appropriate quantity of food to the child. Also, the spoon has two benefits – 1) it works a convenience feature for the mother, as she does not have to wash her hands with soap every time before she feeds the child, and 2) it helps maintain a sanitary feeding practice, as

otherwise the mother would feed the child with her bare hands that may not have been washed with soap.

The bowl and spoon have a positive impact on complementary feeding practices among the community as it helps FLWs as well as beneficiaries visualize and understand concepts like quantity of food and thus help them remember the complementary feeding messages. Another BC explains that the bowl and spoon complement the use of the mobile kunji. If the beneficiaries fail to understand complementary feeding messages using the mobile kunji, the FLWs demonstrate the same using the bowl and spoon in front of them.

Additionally, one of the BCs coordinates with the ANMs to request a beneficiary having a child aged 6 months to help demonstrate complementary feeding to the FLWs during the HSC meetings.

HSC Facilitator

The FLWs are advised to take the bowl and spoon with them when conducting home visits. At the HSC meetings, the FLWs present different ways in which they can demonstrate quantity of food to the beneficiaries making use of the bowl and spoon. In addition, he mentioned that a child aged 6 to 24 months should be fed two bowls of 100ml in a day.

> *"We advise the FLWs to take the bowl with them when going for home visits. And fill your bowl which has a 100ml mark with water and then demonstrate to the mother with a child how much is 100ml in the bowl/vessel they have in the house, so that they get an estimate of how much quantity they should feed the child"*

Another HSC facilitator gave a similar explanation to demonstrate complementary feeding practices using the bowl and spoon.

Auxiliary Nurse Midwife

The ANM also emphasizes on the use of bowl and spoon to measure the quantity of food (200ml for 6 to 8 months child) to be fed to the child. Other than some challenges the FLWs face when counseling beneficiaries in the field that will be covered under objective 4, the FLWs have no problems using the bowl and the spoon. One ANM said:

> *"It (bowl and spoon) is a good thing. Even the FLWs and I didn't know that we should feed the child this much. I only knew that the child should be fed something after 6 months. Like leafy vegetables, or pulses and rice, or porridge or potato or yellow part of egg. We knew all this after training, but didn't know the quantity. That we came to know when we saw the bowl"*

The FLWs demonstrates the age appropriate quantity that the child should be fed by measuring in her bowl and transferring the contents to the bowl the beneficiary usually uses to feed the child. This helps the beneficiaries get an idea of the quantity of food they should feed their child.

Mobile Kunji

Regional Outreach Officer

The mobile kunji (mobile key) is another tool given to the FLWs as part of the job aid kit to assist them in their field work. It is a BBC innovation and helps FLWs to confidently communicate the message to the beneficiaries. It covers topics like birth preparedness, age appropriate complementary feeding, etc.

As the mobile kunji has written descriptions, the FLWs find it easy to remember the messages and counsel effectively. It also has an audio version where Dr. Anita voice is recorded. One of the ROO gives example of birth preparedness and explains the steps that the FLW uses to

convince the beneficiaries to adopt and practice the counseled message. The ROO emphasizes on the helpfulness of mobile kunji in counseling the messages effectively.

> *"And they (FLWs) have mobile, they are dialing and making the beneficiaries listen to Dr. Anita. They (beneficiaries) get interested that only this lady (FLW) is not saying this thing but also the doctor is giving the same message. When the doctor is saying the acceptance rate is more…"*

Block Coordinator

Unlike previously, when the FLWs had to counsel the beneficiaries verbally, now the FLWs make use of the mobile kunji to communicate effectively with the beneficiaries.

One BC explains how the FLWs counsel on complementary feeing using the mobile kunji. First the FLWs explain the quantity of food to be given to the child verbally showing the mobile kunji. If the beneficiary does not understand the message then they make them listen to Dr. Anita who via the phone explains the same message. If the beneficiary still does not understand then the FLWs are asked to demonstrate the quantity using the bowl and spoon.

The messages in the mobile kunji are also made available in the form of stickers which are pasted on the beneficiaries' home walls. It helps them remember the message and practice it.

HSC Facilitator

The mobile kunji is found to be very beneficial as it adds one more dimension for the FLWs to receive messages. The HSC facilitator mentioned that at the HSC meetings, the FLWs are shown how to hold the mobile kunji cards and ways to explain it to the beneficiaries.

Auxiliary Nurse Midwife

The FLWs make use of the mobile kunji. It helps connect the beneficiaries to the doctor via a mobile phone. The ANMs mentioned that beneficiaries (here she addressed a pregnant woman)

feel very happy that they are getting information from the doctor directly. According to the ANM the FLWs find the mobile kunji very effective when counseling to the beneficiaries.

> *"They (FLW) say its (mobile kunji) a very good thing. If we tell the ladies ourselves they didn't used to listen, or didn't pay attention. But since we have been using this (mobile kunji), they listen and there has been a lot of progress."*

The FLWs make use of the mobile kunji doing home visits as well as on the day of VHSND to counsel the beneficiaries as per their requirements. It is also used to counsel the beneficiaries regarding complementary feeding practices.

> *"Like if the child is supposed to be fed after 6 months, and she is not feeding the child, then they go to that point, everything has different, and let her hear that."*

Home Visit Planner (Gruh Bheeth Panchi)

Regional Outreach Officer

The home visit planner is provided to the FLWs to conduct systematic home visits in their area. In the past the FLWs maintained a book where they mentioned the work they did and the beneficiaries they met. On the other hand, in the home visit planner the FLW makes note of beneficiaries especially pregnant women and children aged 0 to 2 years. This helps the FLW in "name based tracking", that is it assists the FLW to track the beneficiaries through this period and counsel them based on their requirements. Since it is name based tracking, the home visits are more systematic and beneficiaries living away from the anganwadi center are also targeted. Additionally, the HVP contains beneficiary appropriate counseling messages that help the FLWs to improve counseling skills and provide counseling as per the beneficiaries' needs.

Systematic home visits helps to reduce FLW work burden as she is conducting home visits in a systematic manner and not going to households randomly. The ROO mentions,

> *"And practically if you will see the planner in a day you will have only one or two home visits. Hardly one visit there. So there is good mental and psychological affect. If there is only one field visit, then I will go and do it. So this means this register has greater impact and specifically the name based..."*

Block Coordinator

The BC mentions that initially that FLWs use to randomly select households for home visits. After the introduction of the HVP, their work has become more systematic, as they can now make a note of all the beneficiaries in their area along with specific information about the beneficiaries such as women who are pregnant, women who are lactating and households that have children of ages 6 to 24 months. In this way they can systematically conduct home visits and provide counseling as per the specific requirements of the households. This simplifies the work of FLWs and also saves time as they know exactly which households to target, and do not waste their time in going to households that do not have the target population. This further helps the beneficiaries as the FLWs can now focus more time and energy to their benefit.

Another BC mentioned, that initially the FLWs used to conduct home visit for name sake and get the beneficiaries signature or thumb impression as a proof that they visited them. Also they used to maintain a book where they wrote their days work. The BC mentioned:

> *"They used to write more and counsel less…"*

But with the introduction of the HVP, the FLWs enter the beneficiaries name in the HVP, which in turn helps them to conduct systematic home visits. This saves FLWs time as they now write less and have more time to dedicate to counseling the beneficiaries.

One BC feels that there is 50-60% increase in the number of home visits conducted. He also noticed an increase in community knowledge on birth preparedness and complementary feeding for children after 6 months. He feels that this improvement is due to the introduction and effective use of the HVP.

HSC Facilitators

Initially, the FLWs did not pass messages given to them at the HSC meetings to the beneficiaries. The HVP was introduced so that the FLWs can conduct systematic home visits and that their work can be monitored by the BC or HSC facilitator during HSC meetings.

> "No one had the HVP, so they used to maintain records in a note book. That was not very clear. But with the HVP, it has been well classified as per the days and helps them to conduct home visits".

Auxiliary Nurse Midwife

The HVP is used by the FLWs. It is beneficial in many ways. It helps ANM monitor the FLWs work in the field.

> *"Its importance is like if there is a pregnant lady or her child, we use it to check their (FLWs) visits, like they should visit once within 3 days of birth, then within a week, and then fortnight, so on it increases, till one year of birth".*

Another ANM mentioned:

> *"Importance is such that every pregnant mother's record is there in this, what is the time of birth, what and all at what duration. When the visit was been paid, all is been recorded in this. How many births took place, when is the delivery expected and for whom. All this can be known from this".*

It also helps the FLWs to submit the monthly report at the HSC meetings, and helps them identify target population and conduct systematic home visits. Additionally, the ANM feels that the HVP is important as it helps keep a record of women from the time she is pregnant through delivery till the child is 24 months. This enables the FLWs to take proper care of the women by conducting planned home visits.

OBJECTIVE 3

Objective 3 is to compare the perceived importance of IYCF recommendations across groups (CARE Staff: ROO, BC and HSC facilitator, ANMs, FLWs and the beneficiaries and how they prioritize the recommendations. In order to find out how CARE staff, ANMs, FLWs and beneficiaries prioritize the IYCF standardized recommendation on complementary feeding, they were asked what they thought was is the most important recommendation. The IYCF recommendations are as follows:

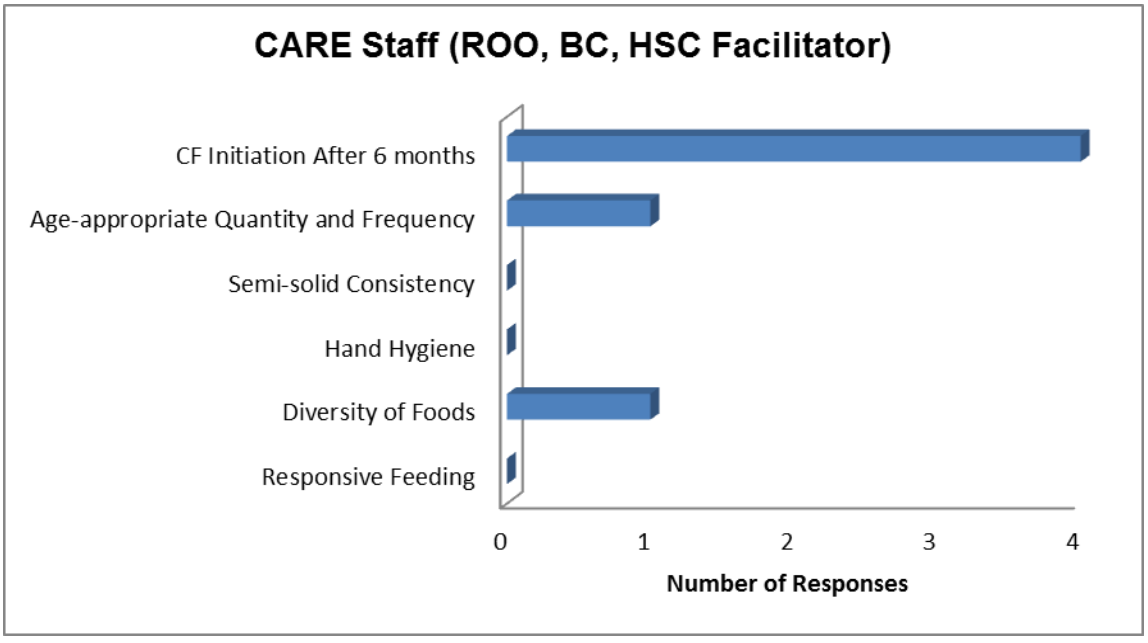
- Begin to introduce cereal-based semi-solid foods after 6 months
- Feed age-appropriate quantity and frequency to the child
- Feed thick semi-solid food
- Wash your hands/child's hands before preparing food and serving food to the child
- Feed a variety of foods to the child using different ingredients available at home – cereals, vegetables, meat, dairy, fats/oils fruits, legumes etc.
- Engage in responsive feeding by being sensitive to hunger cues, feeding slowly and patiently, encouraging the child to eat, minimizing distractions, and making eye contact.

Below is the summary of their responses:

CARE Staff

The CARE staff prioritizes complementary feeding initiation to be the most important. Out of 6 CARE members (ROO, BC and HSC facilitator) who were interviewed, 4 respondents associated initiation of complementary feeding after the child completes 6 months as the most important for the community to adopt. One CARE member felt the quantity of food given to the child is most important and one felt that including diverse foods in the child's diet is most important for the community to adopt. Graph 3.1 shows the perceived importance of standardized complementary feeding recommendation among CARE staff.

Graph 3.1: Perceived importance of complementary feeding recommendation among CARE Staff.



Auxiliary Nurse Midwifes and Frontline Workers (ASHAs and AWWs)

On the other hand, none of the ANMs and FLWs (ASHAs and AWWs) who were interviewed responded that complementary feeding initiation after 6 months to be the most important. The ANMs and FLWs feel cleanliness is most important because if the mother and the child do not wash their hands before handing food, then all the germs will enter the body via the hands and mouth, leading to illness and infections. One ASHA mentioned:

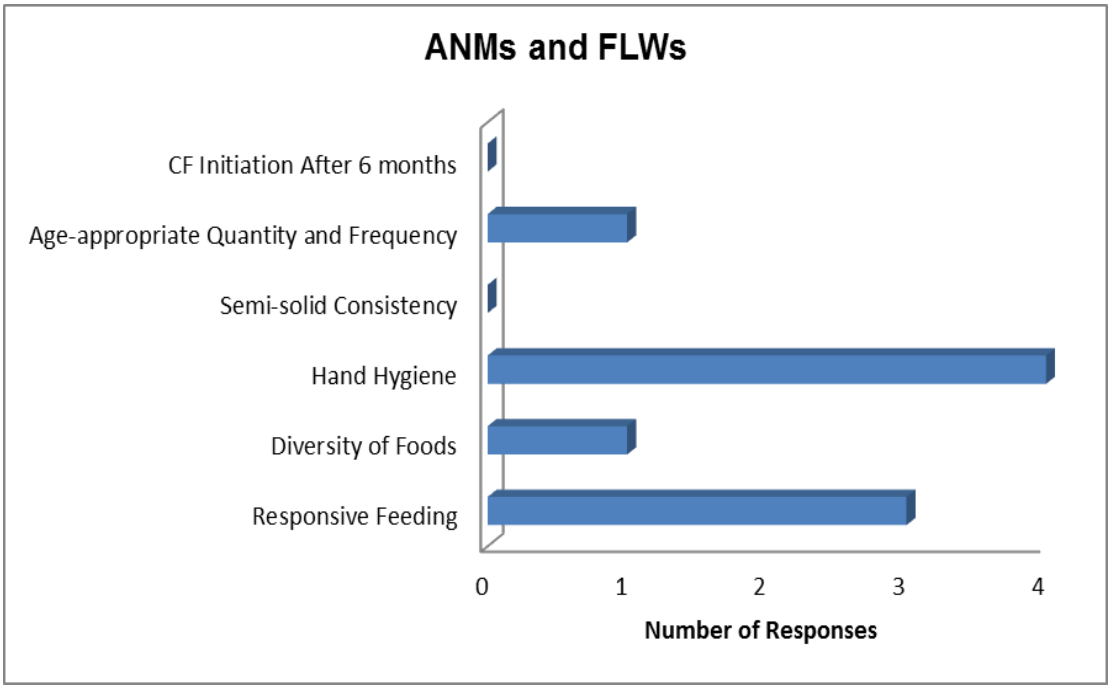
> *"Untidiness leads to diseases, so cleanliness must be maintained at first, then the way of feeding."*

One AWW mentioned:

> *"It is good for the child otherwise impurities will go into the stomach".*

Out of the 10 respondents (2 ANMs and 8 FLWs), 4 responded cleanliness is the most important, followed by 3 who believe responsive feeding is the most important. Diversity of food and age appropriate quantity/frequency of food each received one vote. Graph 3.2 compares the responses by the ANMs and FLWs.

Graph 3.2: Perceived importance of complementary feeding recommendation among ANMs and FLWs.



Beneficiaries

The people in the households, especially the mothers who were interviewed, feel diversity of food to be most important followed by cleanliness. 50% of the beneficiaries received complementary feeding counseling from the FLWs, and others have not heard these recommendations from the FLWs, but have either heard it through role plays or through neighbors.

Out of 6 mothers interviewed 3 mothers considered diversity of food to be most important as the child will not become weak if fed well. The mothers' said:

"We should feed child otherwise he will become weak."

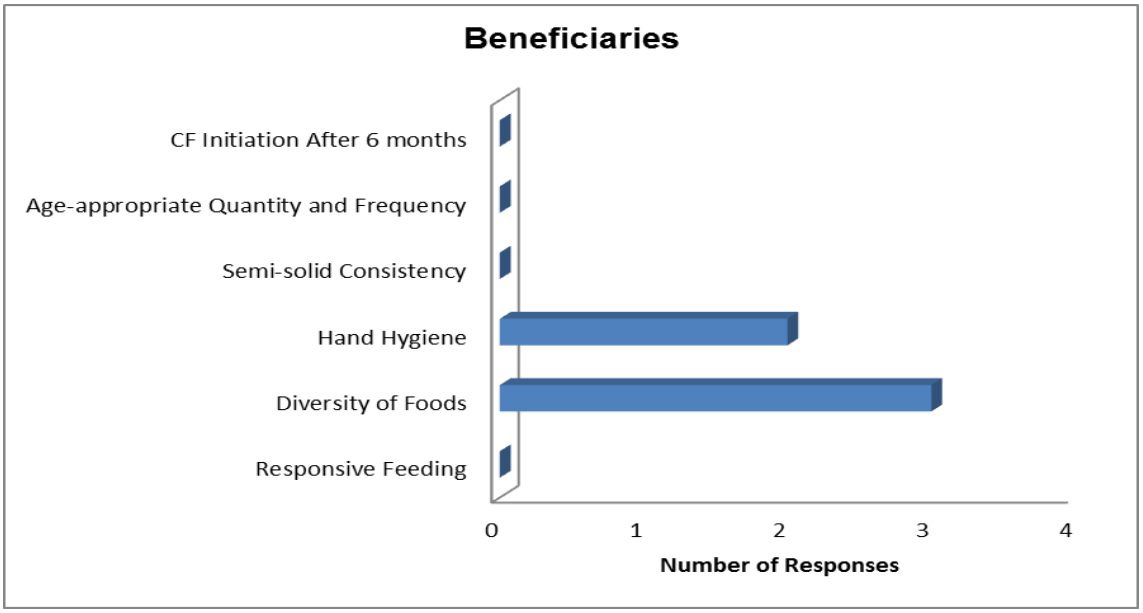
"Medicines are being given to child but there will be no need to give medicines if child will eat food".

Also, two mothers consider cleanliness to be most important for the child as they felt that cleanliness is maintained then the chances of the child getting infections will be less.

"For the child health, I like cleanliness is important and my child should be away from dirt so that disease could not spread..."

Graph 3.3 shows the number of responses by the mothers.

Graph 3.3: Perceived importance of complementary feeding recommendation among households (mothers).



It is observed from graphs 3.1, 3.2 and 3.3 that although CARE staff considers complementary feeding initiation as most important for the community to adopt in order for proper growth and development of the child, the ANM and FLWs who work at the community level consider cleanliness to be the most important. The household's thinking is closely aligned with the views

of ANMs and FLWs views as according to the households diversity and cleanliness are very important for the child.

OBJECTIVE 4

This section covers CARE staff and ANM understanding of different barriers in counseling as well as practice of complementary feeding in the community. It also discusses some gaps in knowledge of complementary feeding in children 6 to 24 months among CARE staff and the ANMs. Additionally, this section talks about the opportunities suggested by the respondents to improve IFHI program. The section is divided by target group, i.e. ROOs, BCs, HSC Facilitators and ANMs. It is further sub categorized according to the key findings like complementary feeding practices, HSC and ANM meetings, sense of fear, etc.

Gaps, Barriers and Opportunities

Regional Outreach Officer

Complementary Feeding Practices

According to the ROO's interviewed, initiation of complementary feeding after a child completes 6 months is very important as it helps provide children with the required, additional nutrition for proper growth and development. Complementary feeding needs to be done in addition to feeding breast milk. Everyone in the family is concerned about their child's health. However, due to some misconceptions, complimentary feeding practices are not properly

followed by mothers. These gaps and barriers are discussed further in this section. One ROO said:

> *"They feel that the child is getting full nutrition from mothers milk and second there are some families are very poor, and they cannot feed their child all this. They can only feed the child things like dal water, dal roti (wheat bread) and rice. But they cannot feed their child things like meat, fish, milk, egg, etc."*

The ROO also mentioned that the FLWs do not find it difficult to counsel on complementary feeding as they have been provided with a bowl and spoon that helps them in counseling effectively. When probed further to understand whether the families have accepted and started practicing complementary feeding initiation messages provided by the FLWs, the ROO mentioned that although families have accepted complementary feeding initiation recommendation given to them by the FLWs, they have not fully acted on this recommendation, he further explains that the practice had increased at the community level when the HSC meetings discussed complementary feeding content, but lately there has been a decrease in the practice which is also apparent in Round 3 LQAS data. The reason that he gave was that when complementary feeding content was introduced at the HSC meetings, a lot of focus was given to it, which has decreased over time.

> *"Are they following it (complementary feeding initiation messages) is the next wait and watch…"*

> *"…HSC meetings we were covering the nutrition part, at that time there was sudden increase in the means increase in the initiation of complementary feeding at the age of 6*

> *month. But in the round 3 (LQAS) what we see it, when we moved on after 3 months (time complementary feeding content was covered at the HSC meetings 3 months prior to round 3 LQAS survey), there is some false is there. It may be the reason that we have not focused as much as we were focusing 3 months (before) at the HSC meetings. So this thing I think was the problem…"*

The ROO mentioned that they are trying to fill in this gap, by reviewing all previous topics at the meetings and then discussing the new content for that day.

When looking at the quantity of complementary feeding that the child should be given, there are some interesting findings that the ROO discusses. People in the community have a tendency to feed their children from their plate, and so they do not know if they are feeding their child age appropriate quantity of food. Also since the parents eat 2 to 3 times a day, the child is also fed only 2 to 3 times, which makes it is challenging to maintain the correct frequency of feeding the child.

Culturally, many people, including some from good socioeconomic status in the community, eat vegetarian food, and due to this the child consumes a less varied diet. When considering families with children of ages 6 to 24 months, usually the mother follows a vegetarian diet whereas the father eats animal foods too. In such a case, the mother does not feed the child non-vegetarian food and instead gives milk *(unclear from the interview if it is breast milk or milk from animal source).* Another misconception in the community is that non vegetarian food will make the child sick. Most families do not understand that a small child can eat all a variety of foods like meat and fish.

> *"…for the veg intake they are ready, but for the part of non-veg they are having the notion that I will feed the child non-veg, he may get stomach upset. He is not having that kind of caliber that he can digest this".*

Cleanliness

In relation to cleanliness, one ROO perceives that it is very difficult to wash the hands and maintain cleanliness before handling food. People wash their hands with water every time they handle food products or before feeding their child. However, they do not use soap to wash their hands. Also due to lack of time, mothers mostly wash only their hands with only water and then feed the child.

The ROO mentioned that the FLWs do not have any difficulty counseling about cleanliness. However, if the economic condition of the family is not stable or they are poor then the beneficiary in turn asks the FLWs to provide them with soap.

> *"Give me soap first, and then I should practice (washing hands with soap). I am not having the access to the soap and how can you expect that if I am feeding my child 3 times I will wash my hand. Hardly am I getting soap for my own bath". (ROO explaining beneficiaries' perception)*

One ROO mentioned that if the people in the community ask for soap, then the FLWs can inform them to use 'ash' instead to sanitize their hands. On further probing, to understand from where the FLWs got information to use 'ash' instead of soap, the ROO mentioned that the use of 'ash' was mentioned in materials provided to the FLWs by PCI and other partners. He further clarifies that HSC content promotes the use of soap only.

Furthermore, the government gives priority to nutrition only for children less than 6 months of age. Since they are not interested in the nutrition for more than 6 months of age, it's a big challenge. The LS (who supervises AWWs work in the field) are all fresh graduates and do not have a good understanding of complementary feeding concepts.

"ICDS should take some interest in it (nutrition for children after 6 months)".

ANM Meetings:

The CARE members face challenges when showing videos and presentations at the ANM meetings due to lack of darkness in the room. This is due to technical difficulties such as lack of infrastructure and ventilation, which makes it difficult to close the doors to make the room dark.

To overcome this barrier, the ROO mentioned that the ANMs are provided with a copy of the presentation notes for their future reference, so they can read the same at home.

HSC meetings

The initial stages of HSC roll out created a lot of confusion for the block level officials including FLWs, CDPO, ICDS, LS, as they believed CARE India was doing its own work through CARE meetings. It was misunderstood that CARE was only giving technical support to the government work and the meetings that are conducted at the HSC level are known as HSC meetings and not CARE meetings.

Secondly, in areas where the HSC meetings are facilitated by the ANMs, CARE officials (ROO or BC) or government officials attend these meetings and observe the ANMs' performance. When there is no one to observe or supervise, the ANMs does not always give her best

performance and complete the meetings in haste. Thus at a few places where the ANM conducted unsupervised meetings, not all the HSC meeting content was delivered to the FLWs.

Another issue pointed out by the ROO on HSC meetings is that there is no consistency in the FLWs work during the week. For example, if there are programs scheduled in the weekend, the FLWs works during the weekend, and then takes a break during the weekday. This disrupted the entire week's schedule.

According to one ROO, nutrition counseling is very easy as the FLWs have the katori and spoon which helps them in counseling. He also finds the culture of Annaprasana helpful as it takes place after the child turns 6 months and thus helpful in early initiation of complementary feeding.

The job aid kit provided by CARE to the FLWs had stickers with messages similar to that in the mobile kunji. These stickers were pasted on the house walls to remind the beneficiaries of the messages that were counseled. However, all the stickers that were provided to the FLWs have already been distributed, and there are no more remaining stickers.

One ROO is not sure how effectively the FLWs have being using the katori in the field

In terms of home visits, one ROO mentioned that ASHAs conduct home visits with less focus on complementary feeding counseling. On the other hand, since the AWW primarily focuses to improve child nutrition in the community, she conducts home visits with more emphasis on complementary feeding counseling.

In addition to routine home visits, the ROO recommended other ways in which beneficiaries can be targeted. For example, information can be conveyed to the people via local newspaper,

advertisements, radio, television, street shows, etc. However, due to lack of electricity in the village, people do not have access to television. Also, in the past people did not receive the messages through radio programs as the frequency chosen was not in service in the area. Additionally, many people are illiterate and cannot read the paper, which adds on to the gap in knowledge.

Additionally, projecting a video in the community and having group sessions may not have a very positive result as those are usually one way communication, whereas FLWs home visits are two way communication as the beneficiaries can asks questions clear their specific doubts too.

FLW Attendance at HSC Meetings

FLWs are not consistent in attending HSC meetings on time. There are a few who do not come for the HSC meetings and give examples of other FLWs who do not come.

> *"That person is not coming for the meeting, nothing has been happening wrong with that person. So why do I have to go?"*

Some FLWs do not attend the HSC meetings if they have to take patients to the hospital. Also the ASHAs get incentives to take pregnant woman to the hospitals for delivery. So in case there is a delivery, the ASHAs prefer taking the women to the hospital rather than attending the HSC meeting. Additionally, there are some FLWs who belong to renowned and influential families who chose not to attend the meetings. There are some FLWs who do not find these meetings interesting and so they do not attend.

According to the ROO these challenges can be addressed by making the HSC meetings more interesting *(details not provided)*, provide non-financial incentives like pencils and eraser to FLWs who have performed well, and to further improve coordination between the health department, ICDS and CARE.

Sense of fear

ANMs have to fill out the ANM tool that has overall statistics of what is happening in her HSC. The ANM tool covers topics like breastfeeding, weak new born care, complementary feeding, family planning, etc. The FLWs report the number of target people (undernourished child, weak child, etc.) in their area to the ANM and the ANM compiles the entire data for her HSC in the ANM tool. ANMs do not fill in the details accurately due to lack of follow-up and filled in values such as 0 indicating no child is undernourished, no child is weak, etc. After investigating this issue, the ROO mentioned that the FLWs feared that if they reported the correct numbers, they would face problems if the numbers did not look good. Also the ANMs did not confirm the numbers for accuracy while entering the values.

The HSC meetings have had a great impact on motivating the FLWs to perform home visits as people from the CARE team as well as the government people visit the HSC and monitor the FLWs work in the field. However, the FLWs are doing their work well only because they are constantly under pressure that someone from the government or CARE may ask her about the work she is doing. The ROO mention how the FLWs perceive conducting home visits:

> *"Somebody will ask me what you have done today, then I will be conscious mind and make decision that tomorrow I will work, or somebody will ask me what you have done?"*

Block Coordinator

Complementary Feeding Practice

The ANMs counsel on complementary feeding during routine immunization day. However, they only identify children who are "weak" and counsel the care-taker on complementary feeding practices.

> *"The ANM also tells (counsels on complementary feeding) when she see the child (on RI day). She tells that the child is not being fed well, he looks weak; please feed the child well..."*

The families start feeding their children dal water without anything else, and FLWs counsel that the child should be fed semisolid food and not just dal water.

Feeding children in separate bowls is a challenge as this concept is new, and will take more time to be fully adopted. Lack of literacy among the people in the community adds to this problem.

Another cultural practice, although rarely performed in the community is "*Annaprasana".* Annaprasana is a tradition in which the family consults a priest (Pandit) to find an auspicious date to feed the child semi-solid food for the first time. It is possible that this auspicious date is available only after the child is over 7 to 8 months old. Thus complementary feeding can be delayed as the family would not even feed the child a pinch of salt before this ritual, let aside complementary feeding. This ritual usually occurs in families of high socio-economic status.

"Ceremony will take place, there will be prayers, and then only can feed the child. If the Annaprasana does not happen until the child turns 8 then until 8 months the child won't even be fed a salt also".

"If you give salt before then it is not considered/ believed to be a good thing."

One BC gave an example of Annaprasana becoming a barrier to complementary feeding in his own home as his parents were against complementary feeding initiation when his sister's child completed 6 months, as the priest declared the exact date for the ceremony when the child was approximately 8 months. As a way out, the BC convinced his sister to initiate complementary feeding when the child completed 6 months and to later have the ceremony.

In the community many people live in joint families, with the in-laws. If the mother in-law makes most decisions in the households, then she may be a great barrier in the child's feeding practices if she does not believe in the concept of complementary feeding. People in the family may also have some preconceived notions that if the child is fed before one year, then the "stomach will come out".

"The mother understands that it is important to feed my child. But if the grandmother does not understand then it will be impossible to feed the child. She will take the child away, (and says to the mother) you will to kill the child or what, want the child stomach to come out or what…"

"(The BC quotes what the community people say) we feed the child after one to one and half years. How will a small child eat all of a sudden? Small children are not given food".

Additionally, people have very busy schedules as they live on daily wages or work in fields, and do not have time to properly take care of their children. Other people in the community or their family members take care of small children. For example, elder siblings may take care of younger ones. When people who are not aware of complementary feeding recommendations feed the children, it directly affects child's growth and development.

In order to counteract this issue the BC suggested to not only counsel the child's mother on complementary feeding practices, but also counsel family members. He also suggests giving live demonstration of complementary feeding to elders in the community.

The BC mentioned that the FLWs find it challenging to explain the concept of feeding two bowls of food to children between 6 and 8 months of age, as the mother gets scared when they say two bowls. The BC suggests FLWs ways to counsel families to feed in small portions that add up to two bowls in one full day. The BC further explains to the FLWs:

> *"… It is true that a 6 months child will not eat two bowls of food. So explain her (mother) to feed the child two spoons, one spoon at a time. Have to feed the child two bowls in one day. I am not telling to feed the child in one time…. Have to get the child in the habit of eating, so that by 8 months the child is capable of eating two bowls of food. In the beginning the child will not eat two bowls, have to get improvement slowly slowly".*

The BC noticed that the FLWs are passing all messages to households related to complementary feeding, except for responsive feeding (like make eye contact when feeding the child, play with the child and feed the child, etc.). Another BC mentioned that although the FLWs sometime counsel on responsive feeding, they do not follow up with the beneficiaries to make sure if it is

actually being practiced. The BC suggested that the FLWs should observe the mothers feeding their children during home visits.

One BC feels that the bowl and spoon is not always used for demonstrations by the FLWs. He gives an example emphasizing the importance using bowl and spoon during home visits by saying,

> *"The FLW went to a house and just mentioned about complementary feeding, that the child is going to complete 6 months now, so start feeding the child something. She did not make use of the bowl and spoon. So the people in the family did not understand how much to feed the child".*

It is challenging to encourage families to feed diverse foods to children, especially when recommending meat and fish.

> *"There is no problem feeding the child roti (wheat bread), chawal (rice), dal (lentil soup) as these are normal foods. But when counsels the families to feed the child meant and fish, the families also does not accept it, means they cannot understand, if they should feed 8 months, 7 months, 9 months child meat and fish".*

The families have a mistaken belief that small children cannot digest these foods properly. But after repeatedly emphasizing the importance of feeding children meat and fish, there has been improvement in a few places and families have started feeding their children meat and fish. They wash the cooked meat and fish to remove the extra spices.

Another incorrect practice followed is that if the child vomits after he is fed something new, the mother stops feeding this food. The FLWs try to find the reason for the vomiting, and guide mothers on ways to feed the child. She suggests on mixing the food well, having a good semi-solid consistency and feeding the child in small quantities.

Lastly, low socioeconomic status also plays a very important role when it comes to feeding the child diverse variety of food as the families cannot afford to buy expensive foods like fruits, meat and fish. The BC as well as the FLWs encouraged feeding children regular food that is cooked at home, so that the child would be exposed to diverse foods.

Cleanliness

People usually wash hands with water before handling food, but they do not usually use soap. Even if the mothers or care takers wash their hands, they do not wash the hands of their children.

Home Visits

The FLWs find it difficult to coordinate their home visits with the beneficiaries' free time. Most mothers in the community complete the household work in the morning and go out to work in the afternoon. However, this does not match with AWWs schedule as she has to manage the AWC until afternoon and only then she can conduct home visits. The BC suggests that the FLWs fix prior appointments with beneficiaries or try to coordinate a time that will suit both.

One BC mentioned that in his block, when collecting data for LQAS, he observed that the ASHA workers make use of the mobile kunji and the bowl and spoon more than the AWW. Also he noticed that the ASHAs perform more home visits than the AWWs. (*However, it is not clear*

from the conversation if these home visits are related to complementary feeding counseling or not.)

HSC meetings

One BC mentioned that in HSC meetings they discuss various issues related to nutrition in the village like number of maternal and child deaths and ways to address an under nourished child. He spoke about under nourished children only, and gave example of a case of an undernourished child in the community and how he was referred to another district hospital for treatment.

The government has not provided any proper infrastructure / building to conduct HSC meetings. Due to lack of infrastructure, projectors and videos cannot always be used, as the rooms where the meetings are conducted may be too bright.

> *"There is no 100% building for the HSC. So in places where there is lack of darkness, the projector won't work. So in this way we can show the video to 40% and the rest 60% we cannot. Even if we have to we cannot show".*

When projectors and videos cannot be used, they make use of flip charts to explain to FLWs. They also coordinate with ANM and arrange for a mother with a child 6 months of age to give a live demonstration of complementary feeding to the FLWs.

There is a general feeling among people that the government works only to benefit themselves, and that no one is thinking about the community and the poverty in the community.

The BC feels that HSC meetings schedules are sometimes disrupted and rescheduled to accommodate other national programs like the polio program and immunizations, when they are scheduled around the same time.

Lastly, stickers provided in the job aid kit did not have much success. The BC mention:

> *"the issue (with the sticker) is that, even you are aware that houses are made of soil and straw, so it does not stick and wears off in a day, and so it is not very successful".*

The BC provides a suggestion to have a sticker that the people can hang on their walls instead of sticking.

FLW Attendance at HSC Meeting

According to one BC, one major reason for low attendance in the HSC meetings is that FLWs in his block live away from the HSC and have to travel on foot to get to the meeting. During the rainy season, most roads become inaccessible due to flooding, which makes it even more difficult for the FLWs to attend the meetings.

The BCs mentioned that they are proposing or planning to decentralize the HSC facing such problems, so that all the FLWs will be able to attend the HSC meetings and will not miss out any important content.

> *"If they (FLWs) cannot come (due to distance), no problem, we will do it (training) twice. There are 4 (FLWs) who are close by (To the HSC where the HSC meeting takes place) we will adjust over there (give the training), and there are 4 pockets means we will separate the 4 areas (and give training to the FLWs in areas close to their place) so that*

> *they won't have any difficulties commuting as well as the message will be delivered to the FLWs on time".*

Another obstacle in the success of HSC meetings is that 30 to 40% of FLWs are not interested in the work they do. In order to motivate FLWs, the BC suggests motivating FLWs by giving them gifts for performing well. This will also encourage competition and help motivate other FLWs to perform better.

HSC Facilitator

Complementary Feeding Practices

According to one HSC Facilitator, it is a very challenging to feed the child diverse food, especially in rural areas due to poor socio-economic status.

> *"People who are poor…. They cannot feed their child diverse kinds of foods, nutritious food to their child. This is what is lacking in the area. These people eat roti (bread) every day, and feed the child the same. The diversity that should be there in the food, which is important for the child, is lacking, especially in the rural areas".*

The HSC Facilitator mentioned that before counseling the community on complementary feeding, there was a belief that the child's stomach will protrude if fed food after 6 months and the child will become undernourished. The people preferred feeding children breast milk or other milk products only.

> *"Initially in the village people used to not like feeding their child food after 6 months. They had this misconception that if we feed our child food, then the stomach will come*

out. Means food is not good for the child's health. For this, for the health they preferred giving the child more milk (breast milk) or milk got from outside".

Furthermore, the families do not prefer feeding food after the child completes 6 months as they believe that the child is still small and not capable of eating food.

"Initially, in the time period after the child completes 6 months, they (family members) do not prefer to initiate complementary feeding early. Okay, they want some time to pass by before the child is capable of eating food. Then only will initiate complementary feeding".

Due to the some old traditions and lack of knowledge about complementary feeding, people were not aware of the benefits of complementary feeding, and so did not feed their child after the child completes 6 months. After explaining the importance of feeding the child semi solid food, people now have started feeding their child as per complementary feeding recommendations. But progress is slow.

"The FLWs find it difficult to explain to the beneficiaries. Like in the area, most of the women are foolish/ stubborn (Murkh) and still hold on to the old tradition that if the child eats food then something will happen to the child. And so is not easy to convince. But with the increasing knowledge and information, more people are becoming aware and that it's the right thing and the FLWs are telling the right thing for their child".

Another HSC Facilitator feels that one reason for slow progress is because FLWs just provide information to the beneficiaries without convincing them to actually practice it.

"Like that for the sake of saying we (HSC Facilitator as well as the FLWs) tell them (beneficiaries), but only few have started practicing".

The HSC Facilitators also feel that the Annaprasana ceremony is a barrier to complementary feeding initiation, and recommends that the families should be counseled on the benefits of complementary feeding.

Home Visits

Very few FLWs and ANMs conduct quality home visits. Also many FLWs and ANMs are not very transparent about the findings in the village and try to hide some important findings. The HSC Facilitator mentioned that FLWs are motivated during the HSC meetings to conduct quality home visits and also to create a motivating environment during the meetings.

In areas where there has been an increase in the number of home visits in relation to complementary feeding, better results have been observed in terms of complementary feeding practices.

Another problem highlighted by one HSC Facilitator is that, although some AWWs are hired, due to cultural tradition where the daughter-in-laws are supposed to stay indoors, they do not go out to do home visits. This basically defeats the purpose of hiring AWWs when they cannot fully perform their duties.

HSC Meetings

Some HSCs do not have proper infrastructure to display HSC content using videos and projectors as either they are held in the open or the rooms are too bright.

> *"To view things properly on the screen, there should be proper facility should be made available, and for that proper infrastructure should be there. Otherwise whatever we display via the mobile (mobile projector) does not have enough focus when viewed in bright light. So in many places this thing was not useful."*

The HSC Facilitator recommends having a big screen like the *"cinema screen"* for this technology to be effective.

One BC mentioned that when explaining the FLWs about complementary feeding initiation he tells them:

> *"For a child who has completed 6 months, okay from 6 months we counsel them to give complementary feeding, that after 6 months you can start giving complementary food to the child".*

Both HSC Facilitator and ANMs facilitate the HSC meetings. According to the BCs, the FLWs take the meetings facilitated by the HSC Facilitator more seriously than when facilitated by ANMs. This is because 1) the FLWs take the ANM for granted.

The HSC Facilitator gives an example of how the FLWs take ANMs for granted.

> *"She is ANM didi ('didi' used for respect. It means elder sister), whatever you want to mention tell us. She (FLWs) does not like sitting in the meeting for a long time. And if we (HSC facilitator) conduct meetings, then they understand that these people have come from outside, they have come for our meeting. They are going to conduct the meeting for*

two to two and half hours. They cannot say anything here. For this, it's like some kind of pressure also among the FLWs…"

2) Not all ANMs have the capacity to manage meetings and keep the FLWs interested in the discussion for two hours. 3) When the HSC Facilitators conduct meetings, the FLW feel obligated to attend and listen. They do not feel the same when the ANMs conduct the meetings. 4) Some ANMs are not very interested in facilitating the HSC meetings as they perceive it as a burden or extra work.

One solution to this problem as suggested by an HSC Facilitator is to motivate ANMs to perform well at the HSC meetings and have someone continuously observe HSC meetings facilitated by the ANMs. The ANMs need to be continuously monitored and motivated to perform well when facilitating the meetings.

"If she (ANM) has the freewill to decide to conduct the meetings or not conduct the meetings that I (ANM) have to conduct the meetings, it's up to me, there is no one above me. Like the government people who work do not have much influence…"

Sense of Fear

One HSC Facilitator mentioned that in his PHC, there are places that are not easily accessible. In order to reach those areas, people have to cross 2 to 3 rivers. FLWs are sometimes scared to go to such places.

"There are areas in this PHC that are across the river. Sometime we have to cross 2 to 3 rivers. So when going to these places sometimes I get scared. Also there are some areas

where people are not of good nature (Pravati). So at such times there are some difficulties. Rest of the places are good".

He further explained that:

"Means, even if they (HSC Facilitator) want some help then they don't offer help in that way. They feel that they (CARE) are doing their own work".

FLW Selection Criteria

According to one HSC Facilitator, the FLW selection is not fair. Instead of selecting FLWs based on their competency and skill level, they are selected based on local biases. For example, they get selected if they are related to public representatives. The HSC Facilitator feels that at times the FLWs cannot even comprehend to what he is trying to convey. They cannot correctly fill up the HVP either. The HSC Facilitator feels that the FLWs do not deserve their position.

"(HSC Facilitator*) experience working with AWW, ASHA has been good. There is one problem that they are not skilled as should be. This is due to a local reason. The AWW and ASHA are not selected as per their competency, they are not of the level they should be, because of which we are having problems. This is the truth".*

"Now, her standard is that she should at least be matric (10th grade) or inter (12th grade) passed. What level is she, I don't believe it that they have cleared this level. The selection process which is going on now is ok ok. Previously the public representative used to select their relative, whatever level they may be. So because of that there is problem and this is the truth".

Auxiliary Nurse Midwife

Complementary Feeding Practices

Most families in the village are of low socio-economic status. Due to poor financial conditions the women in the village go out to work either to get wood/ fuel for cooking, or they go to harvest in fields. Since the mother goes for work, she cannot give enough time to the child. The elder siblings take care of the younger one and feed the child what they eat. The challenge here is that the child is not fed age-appropriate quantity and frequency of food.

Also, due to lack of available resources at home like different kinds of fruits and vegetables, it becomes difficult for the family to feed the child a diverse balanced diet. And so they are counseled to feed the child whatever is cooked at home.

On child nutrition, one ANM mentioned that she counsels mothers whose children are weak. (*She does not mention about complementary feeding counseling for all children ages 6 to 24 months*).

> *"Like sometimes if I notice that any particular child is weak. Breast milk is not sufficient for him, his health is deteriorating gradually and then I tell his mother about the nutrition. Sometimes if I notice any pregnant lady who is weak, like if haemoglobin is lower than 11, sometimes 9 or 10 and then I guide her to take balanced diet".*

She also mentions that very few women actually feed their child properly.

"Now these mothers they don't feed properly, like if the child is of 6 months, they are supposed to feed, very less mothers will feed. They feed it just for the sake of it. A little is been fed and that's it."

Radio channels play programs to educate the community on ways to feed the child. People in the community have access to radio. In spite of this they fail to practice it. Additionally, lack of education further adds to the negligence in complementary feeding practices.

"Because they don't understand, they are illiterate, they don't have knowledge and they don't know what to do and what not to do. They feed their baby only on mother's milk till the age of 2 years".

Cleanliness

In the village people do not wash their hands with soap before handling food products. Instead they wash their hands with dirt (mud). The ANM counsels the families to use 'ash' if they do not have access to soap, as she believes it acts as an antiseptic.

"No, it's (washing hands with soap before handling food) not happening right now. Very less, a few educated women are doing this, means one in hundred, there are many who wash hands with soil. We tell them not to use soil, instead use ash, from cooked food, or use soap".

"*No. One or two ladies said that the government should give soap as well. Then I said that you can use whatever soap you have at your home, not necessary that it should be*

_____ (name of soap) only. You can use whatever is available. If you don't have any, then when you cook food, you can use the ash from chulha (stove) to wash your hands".

"Ash, that also works as an antiseptic".

Street plays are performed to educate the people about hygiene and sanitation. However, due to cultural barriers most women in the village do not come out of their homes, and therefore do not benefit from street plays.

When talking about hand hygiene practice in the community, another ANM gives her own example that even she washes her hands when at the HSC but once at home she too is not very religious about washing hands with soap, and only washes her hands with water when handling food. The ANM further mentions that there is awareness among people to wash their hands with soap and water, but due to negligence, many people fail to practice it.

"ANM: Now if we are unable to do it (wash hands with soap), then in the field, what other people are going to do?

Interviewer: So why do you feel people are unable to wash hands with soap?

ANM: I don't know why people neglect it. It is because of negligence what else…"

Home Visits

One ANM finds it challenging to conduct home visits due to increased work responsibilities by the government. Apart from her routine duties at the hospital and HSC, the ANM has to manage work related to VHSNC, like arrange trash cans in the community as well as create a concrete area around the hand pumps so that the water drains properly.

"ANM: we have been merged with VHSNC to implement all that work.

Interviewer: what work?

ANM: make complete dustbin, on roads, and people will throw waste in that only, where ever hand-pumps are there, beneath that make it floor, to make drains. This all things were not for ANM. In this we people have been involved, this all are things of Panchayat (village assembly), they should have implement this.

Interviewer: so you all have got extra work?

ANM: yes, we got extra work, that's why we don't have time remaining so that we can go out and meet the village women, or have a word with them".

HSC Meetings

Some ANMs have started facilitating HSC meetings. When asked how it feels to be responsible for facilitating the HSC meetings, one ANM mentioned that although her work load has increased she feels proud of herself as she is facilitating the meetings now.

Both ASHA and AWW worker fill in the home visit planner. ASHAs are volunteer health activists and do not get any incentives or compensation to fill out the HVP. The ANM recommends that if the ASHAs got something on a monthly basis, they would be good more interested to do their work.

Another ANM mentioned that the HSC Facilitators used posters when facilitating HSC meetings that helped them make the topic interesting for the FLWs to understand as it was visually

appealing. The ANM also wishes to make use of the posters, but they have not been made available to her.

Sense of Fear

One ANM mentioned that people especially the lower caste do not understand the importance of vaccinating their child on time. They fear vaccines as they feel that their child may get fever or die. When the ANMs go in the field to convince the beneficiaries, they face challenging situation where they are also attacked by people who come with sticks to beat them. Thus the ANM mentions they are constantly under tension when working in the field.

> *"Yes we face a lot of tension. There are no limitations of the challenges. They are that backward, you can imagine!"*

Table 3.2: Key Barriers and Solutions common across CARE Staff and ANMs

Topics	Barriers / Misconceptions	Respondents Suggested Solutions
CF Practice	Poverty – Cannot feed meat / fish	Feed whatever is cooked at home
	Breast feeding is enough, CF not required	
	Quantity and frequency of feeding not followed	Emphasize on the use of Bowl and Spoon, and feed small portions frequently
	Cultural/Religious traditions. Parent is vegetarian.	
	Child cannot digest non vegetarian food	
	Lack of CF knowledge among family members who feed children	Council family members on CF. Give live demonstrations to elders.
	Delay of initiation of CF due to religious ceremony (E.g. Annaprasana)	
	Responsive feeding not practiced	FLWs to observe mothers feeding their children during home visits
	No electricity and radio reception	

Hygiene	No time to wash hands with soap	During home visits, ask mothers to soak hands in water to visibly see the dirt.
	Poverty – Cannot buy soap	Use ash to wash hands.
ANM and HSC Meeting	Poor audio visual projection	Provide copy of presentation notes, use flip charts, live demonstrations.
	Low prioritization of CF content	Review previous topics covered, and reemphasize on CF
	Poor FLW attendance	Make HCS meetings more interesting
	Lack of incentives for CF	Provide non-financial incentives
	Lack of motivation, training, or FLWs cannot leave home	Improve coordination between health department, ICDS and CARE
	Low attendance as FLWs live far and need to walk to meetings	Decentralize HSCs facing this issue
	Lack of motivation, training among ANMs to lead meetings	Government and CARE officials continuously motivate and train ANMs
Sense of Fear	FLWs fear they would be in trouble if they reported negative outcomes (number of under nourished children, child deaths)	
	FLWs conduct home visits under pressure as they are under supervision of government or CARE staff.	
	Hostile areas- risk of getting beaten up.	
	Home visits - inaccessible areas	
Home Visits	Lack of coordination between FLWs and beneficiaries	Fix prior appointments with beneficiaries
Job Aids	Stickers that do not stick on walls	Provide wall hangings instead of stickers
	Lack of appropriate supplies (E.g. Stickers)	

Chapter IV – DISCUSSION

Under nutrition is wide spread problem in India, especially in Bihar (Sinha, 2012). Since the introduction of Millennium Development goals (MDGs) in 2000, more attention has been given to improve the maternal and child health and nutrition (UN, 2012). Although there has been considerable improvement in breastfeeding practices in Bihar, complementary feeding after 6 months is still in its infancy states. CARE, India launched the health sub center meetings in Bihar as an initiative to improve maternal and child health and nutrition by increasing consistent availability of high impact, cost-effective and high quality family health interventions (CARE India, 2011). This study aimed to understand the gaps, barriers and opportunities related to IYCF content across CARE members, ANMs, FLWs and beneficiaries, as a means to provide recommendation for future IFHI program.

This section covers important findings from the interview analysis along with recommendation to improve the quality of work being done.

Lack of Prioritization to Complementary Feeding

IFHI's main target has been HSC meetings, where it aims is to create a platform for the health and ICDS to work together to improve maternal and child health outcomes in the community. The target population of HSC meetings is women of child bearing age, pregnant women and children under 24 months. The five major topics covered at the meetings are pre and post natal care, emergency birth preparedness, weak new born care, family planning and nutrition. Nutrition is covered in two halves: Exclusive breast feeding for children of ages 0 to 6 months

and then complementary feeding along with breast feeding after the child completes 6 months until the child is 24 months. At the time of this research, complimentary feeding was one of the newer topics covered at HSC meetings. According to the interview responses, it seems that not enough importance is given to complementary feeding in the HSC meetings. Topics related to complementary feeding should be reinforced at the HSC meetings as well as at other meetings like ANM meetings, ASHA Divas, AWW meeting, etc.

The main focus of government programs in Bihar has been to decrease maternal and child deaths, which is more directly and intuitively linked to maternal and child deaths occurring during pregnancy, at the time of delivery, and when the child is 0 to 6 months as they are more vulnerable to infections. Also, the importance of initiating breastfeeding immediately after the child is born and exclusive breastfeeding has been ingrained in the FLWs through repeated information and training. However, not much emphasis is given to complementary feeding messages for children after they complete 6 months.

Since the ANMs and FLWs are employed by the government, their work also focuses less on complementary feeding. If the HSC meetings emphasize on complementary feeding in every meeting, it will help the FLWs to remember that even complementary feeding is as important as pre-post natal care, exclusive breastfeeding and family planning.

Prevention is better than Cure

The BCs identified one of the primary focus of the HSC meetings to eliminate under-nutrition. Under nutrition can be eliminated in two ways: 1) By treating the current undernourished cases, and 2) preventing children from becoming under nourished. Complementary feeding

recommendations aim to achieve both aspects. But the latter has more challenges and is generally less known and misinformed in the community. Most of the respondents addressed treating the under nourished children when asked if they provided complementary feeding counseling to the beneficiaries.

Prevention should be made at least equally important as treating existing under nourishment. It should be emphasized in the HSC meetings that complementary feeding counseling should be done for all children who fall in this age group, and not just for under nourished children.

Immediate Results

Since most of the government initiatives and work is on immunization, family planning, and child health and nutrition for children less than 6 months, the FLWs main focus has been to increase the number of immunizations, family planning, number of institutional deliveries and exclusive breast feeding. In comparison, less work has been done in relation to complementary feeding. One reason for this is that immediate results of complementary feeding cannot be noticed, unlike immunization where immediate benefit can be noticed. Complementary feeding is more of a long term benefit that a lot of people may fail to understand. A child may only die due to sever under nourishment. Thus the long term effect of not providing complementary feeding like stunting, poor cognitive development, under performance at school and lack of success in life, as well as benefits of feeding the child should be explained using audio visuals to all.

Communicated Message

The CARE staffs, ANMs and FLWs have a very good understanding of the need to initiate complementary feeding after the child completes 6 months. However there are discrepancies in the messages that are delivered. From Table 1, it is noted that there are discrepancies in the knowledge of ROOs, BCs, HSC Facilitators and FLWs, on when exactly to initiate complementary feeding, and how much and how often to feed the child. This in turn means that a consistent message is not delivered to the beneficiaries. This can create confusion among beneficiaries as they may hear different messages from different FLWs visiting them, or when discussing with other beneficiaries. Another ill effect can be that beneficiaries could lose confidence in the knowledge of the FLWs, and not follow their recommendations at all. This could also affect other programs implemented by FLWs. Thus it is very important to pass consistent information throughout.

Knowledge of complementary feeding should not only be explained to the FLWs and beneficiaries, but also to CARE staff. It is very interesting that an HSC facilitator mentions that complementary feeding CAN be given ("upari aahar de sakte hai") instead of complementary feeding SHOULD ("upari aahar dena chahiye") be given. Sentence formation can make a difference, as the FLWs and the beneficiaries may feel that it is okay to not feed the child according to complementary feeding recommendation. Proper emphasis needs to be given when counseling complementary feeding messages.

Dal water is another source of confusion. The HSC Facilitators talked about feeding the child dal water when initiating and once the child is used to eating something to start feeding the child semi-solid food. This is a source of confusion as dal water preparation may vary between

household. From the respondents, the consistency of dal water was unclear. The HSC facilitator may mean dal with less water and added vegetables, fat or cereals making it less fluid in consistency, but it may be understood differently by the FLWs. The households, on the other hand, may totally misunderstand the FLWs counseling and feed the child only water that is left after boiling the dal (lentil) Also the families may find it convenient to feed the child dal water only and not feed the child semi-solid food for a prolonged period of time. When counseling about dal water, its consistency should also be discussed, along with diversity of food.

HSC Meetings

Role plays can be an important part of HSC meetings for proper understanding and practice of how to actually conduct home visits. The ANMs or the HSC Facilitator can put this in a form of a game like fish bowl where the FLWs have to pick up a note from the fish bowl which has her role described in it. In this way the FLWs may feel more comfortable in acting out in front of everyone. This will encourage mentoring and sharing knowledge.

The ANMs and the FLWs address the HSC meetings as CARE meetings. This may be an issue as they may not have a sense of ownership. It should be emphasized that whatever is being done at the HSC meetings is for their benefit and that it is being done by the government. And CARE is only providing technical support to make the ANMs and FLWs work more effective at the same time easier in the field.

One of the reasons for the lower attendance of FLWs in the HSC meetings is that the FLWs live far from the HSC, and on the day of the meeting, they have to walk to the HSC. This becomes even more difficult when the weather is bad. A respondent suggested having separate meeting

for the FLWs who stay far and cannot commute during severe weather condition. This idea can be put into practice.

The FLWs have to fill in the FLW tool and the ANMs fill in the ANM tool that has quantitative questions related to complementary feeding in the community. These tools are checked at the HSC meetings by the ANMs or the CARE staff (HSC Facilitator or BC). Since the HSC meetings have now started reviewing previous HSC topics, it is not clear how complementary feeding is been discussed or reviewed. It could be that the ANMs or HSC facilitator are only discussing the survey tool and not going through complementary feeding recommendations. In addition to discussing the survey form, complementary feeding recommendations should be reviewed in the form of pointers.

ANM Leading HSC Meetings

One of the main aims of IFHI is to strengthen the capacities of the ANMs, so that they can conduct the HSC meetings by themselves. In most places the ANMs have started conducting the HSC meetings under the supervision of the CARE staff or government sector. The ANMs get training at the ANM meetings. However, when conducting the meetings, the ANMs in the blocks sampled were not provided with all the resources like audio visuals and posters that are used to train the ANMs at the ANM meetings. Due to lack of resources the ANMs find it challenging to pass the message effectively to the FLWs and make the HSC meetings interesting. Furthermore, it is observed that the FLWs religiously attend meetings facilitated by the HSC Facilitator, but that is not the case when ANM leads the meetings. This may be due to the feeling that HSC Facilitator is superior as he is someone associated with CARE, whereas the ANM is part of their

community and more like an equal. Another reason can be because when the HSC Facilitators conduct the meetings, they have more resources to make the meeting interesting. This also suggests that the HSC facilitator is more resourceful and superior. Since the ANMs are not provided with posters or audio-visual aids when taking the meetings, the meetings are less interesting and they seem less important when compared to the HSC Facilitators.

The ANMs need to be given all required resources in order to conduct the HSC meetings more effectively. This will help ANMs to get the same level of respect from FLW that the HSC Facilitators get, and encourage them to attend more meetings conducted by the ANMs. Additionally, this will increase ANM's morale and make her feel empowered. She will also be able to make the meetings more interesting.

Job Aids

Bowl and Spoon: The CARE members, ANMs and the FLWs understand the importance of the use of the bowl and spoon to feed the child age appropriate quantity of food. One BC explained the importance of spoon when feeding the child, so that if the mother does not have time to wash hands, she need not wash hands with soap every time she feeds her child with a spoon. The spoon serves as a convenience as well as to maintain hygiene. This was a very concerning point, and hand washing with soap should be encouraged in addition to feeding with the spoon. CARE staff, ANMs as well as FLWs need to be re-trained on this topic with emphasis on importance of both, using bowl and spoon, and hand washing.

Another point to note is that not all FLWs carry the bowl and spoon with them for counseling on complementary feeding. For most households, the complementary feeding messages were

counseled verbally without showing or demonstrating complementary feeding practices. Due to this, the households fail to understand the quantity of food to be provided to the child. One reason given by the AWWs to not carry the bowl and spoon during home visits is because they go for home visits in the afternoon, directly from the AWC where they have a very busy schedule.

According to the CARE staff and the ANMs, the HSC trainings help the FLWs in effectively counseling beneficiaries as FLWs have job aid kit, and also are now equipped with proper counseling messages. According to them, FLWs also feel the job aid kit helps them in counseling. However, most households who were interviewed had only been told verbally by the FLWs about complementary feeding[1]. The households did not get a demonstration of the bowl and spoon.

Job aid kit helps the FLWs to counsel the beneficiaries on various topics covered at the HSC meetings. There were some newly appointed FLWs who did not receive the kit. This can hinder FLWs efforts to counsel the messages effectively in the community. In order to resolve this issue, the FLWs should receive the job aid kit at the time of appointment, or at least before they start the home visits. It can be handed over to the FLW at the HSC meetings by the CARE staff, their respected supervisors in the health department and ICDS, or through the ANMs.

Also it seemed like the CARE staff and ANMs were okay with the FLWs only showing the mobile kunji to the beneficiaries and making the beneficiaries listen to Dr. Anita when required.

---

[1] Front line worker and household interviews are not included in the results section and will be expanded on in other student report.

It should be emphasized at the HSC meetings that the FLWs need to use all three means to be effective, i.e. verbal: making use of cards and explaining, auditory: by listening to Dr. Anita and kinesthetic: demonstrating complementary feeding using bowl and spoon.

Home Visit Planner: The HVP is not understood very well by ANMs and FLWs. Though this paper does not analyze FLW perceptions and understanding of the HVP, through field visits it was observed that FLWs see the HVP as a burden as CARE does not provide any incentives or compensation to fill the HVP. Its actual importance is not understood by the FLWs. HVP is primarily being used to submit monthly reports at the HSC meetings and counsel pregnant women, mothers with new born babies and schedule immunizations. Furthermore, the ANMs conduct random home visits and so she may not cover all the beneficiaries in her area. The HVP can be used more effectively to systematically conduct home visits, and also counsel on complementary feeding practices. One way to achieve this is by emphasizing in complementary feeding in each HSC meeting, along with proper reasoning on why each job aid like bowl and spoon, HVP, mobile kunji are important, and what are their real world benefits.

Stickers: The FLWs are provided stickers in the job aid kit that have similar messages similar to what is in the mobile kunji. These stickers are supposed to be stuck on the walls in the beneficiaries' house so that they are continuously reminded of the message. However, there have been instances where the FLWs had already given out all the stickers they were given out, and they did not get replenished. Also, most houses are made of mud or straw, and the stickers do not stick on these walls. Provision can be made to have an option to hang the stickers instead or other type of home counseling materials like posters and charts which can be given to the beneficiaries to hang on their walls.

Content Delivery to Households

Visual charts consisting of pictures of parents feeding the child, pictures showing the quantity, frequency, consistency and diversity of the food can be provided to the FLWs to take for home visits. The background and the surroundings need to simulate conditions similar in the villages. For example, the hospital building should look like the hospitals in the rural areas and not a two or three storied building. Also the houses, parents and child should be similar to the people in the villages. The bowl should contain foods similar to what is available at the households.

Lack of Motivation

Unlike AWWs, the ASHAs do not get a fixed salary to do their work. Also, the ASHAs do not get any incentive to conduct home visits to counsel on complementary feeding. They get incentives to take the child for immunization, conduct institutional deliveries and family planning. Thus there is no motivation for the ASHA to conduct home visits for complementary feeding counseling. This situation may be improved by providing non-financial incentives to the best performing FLWs. This award should not be based on the quantity of home visits they do but also how much improvement is seen in their respective areas. In this way the FLWs and ANMs will be motivated to perform better.

More emphasis should be given on the quality of home visits, where the FLWs visit the beneficiaries and take time to understand their needs and counsel them accordingly. The FLWs should not only counsel the households but also follow up at regular intervals to see if they are practicing what has been counseled.

Vegetarian and Non-Vegetarian Food

There are many families who prefer a strict vegetarian diet and do not feed their child non-vegetarian foods like meat, fish and eggs. Thus, HSC meeting content on diversity of complementary feeding needs to contain foods that serve as an alternative to non-vegetarian diet, but still serves the purpose and provide the child with protein and micronutrients like iron and zinc. Feeding the child all kinds of foods that are locally available like cereals, pulses, rice, milk, vegetables, fruits, along with fortified foods or supplements will help to meet the nutritional requirements. Additionally, families who eat non-vegetarian can be counseled on how to feed the child meat, fish and eggs. For example, the child should be fed non-spicy foods in small quantities. As one respondent mentioned, benefits of feeding the child should be explained well to the families. Families should know that if the child is fed well then the immune system will be strong and the child will not fall sick. Although feeding the child diverse food may be expensive for the parents, in the near term it will save them doctor fees. Additionally, in the long term, due to better health, the child's future earning capacity will likely increase.

Annaprasana

Annaprasana is a religious tradition that is usually practiced by families of high economic status. It is the time when first solid food is introduced to a child. Annaprasana literally means "feeding rice". This ceremony takes place when the child is in 5^{th} to 7^{th} month for boys and 6^{th} to 8^{th} month for girls. The date and time is scheduled by the Hindu priest (Priest Pradeep Sharma). This ceremony can be beneficial if it coincides with the time when the child completes 6 months. However, auspicious dates are often not available and a child may go until 8 months before starting complementary feeding. This can affect the child's nutritional status, thereby affecting

the child's future growth and development. One way to counteract this is to counsel the priests and gain their confidence by proving that timely initiation of complementary feeding after the child completes 6 months is essential for proper growth and development of the child. The support from the priest may help solve the problem.

Another way to minimize the ill effects that Annaprasana sometimes has, is by using methods similar to what the government of Gujarat state has initiated, where instead of discouraging the cultural practice, they have adapted the tradition to fit the current needs complementary feeding. In Gujarat, Annaprasana Day is organized by the government, and is celebrated once a month at the anganwadi center (ICDS Gujarat, 2010). Mothers and caretakers within the family are informed about benefits of appropriate complementary feeding and caring practices and correct ways to practice it. Mothers and caretakers are motivated by AWWs to participate, and sometimes also escorted by the anganwadi helper to the anganwadi center on the day of the session. The participants are informed to get bowl and spoon along with them to the session, which are used in activities to demonstrate child feeding. Additionally, the participants are asked to get one readily available raw food item from their home, which is used in demonstration of recipes to feed infants.

Hand Washing

Most of the people in the community wash hands with water before handling food, but very few wash hands with soap due to financial constraints, lack of time and old habits. At times when soap is not available at home, the beneficiaries are counseled by the ANMs and FLWs to use ash instead as it serves as an antiseptic. Although according to some studies the use of ash as an

alternative to soap has similar outcome to washing hands with soap (Laskar, Mahbub, & Harada, 2005), there is a potential for ash to get contaminated from human and animal feces if allowed to accumulate in the vicinity of the home or from waste water (Bloomfield SF, 2009). Also, ash and soil can get stuck in the finger nails and can be consumed when the hand comes in contact with the mouth. Hand washing involves mechanical rubbing of the hands. If it is combined with the use of soap it is more effective compared to the use of ash or soil or only water as: 1) soap acts as a surfactant, and 2) people tend to rub their hands more when using soap as compared to ash or soil and use more water to get rid and rinse away the soapy feeling (Bloomfield SF, 2009).

Behavioral change methods should be used to modify hand hygiene practices in the community. Demonstration of hand hygiene and the reason why hand hygiene is important should be explained well to the community. As one respondent suggested, one way to do so is by asking the mother or guardian to immerse hands in water and see the amount of dirt that has contaminated the water. This will be ingested if the mother or the guardian does not wash their hands and the child's hands before handing food. Additionally, the ANMs and the FLWs who counsel the beneficiaries should be as role models and practice the same.

Self-Sustainability

Members from the community can be involved in communicating the messages on complementary feeding practices, in addition to the FLWs and ANMs. This can be done by 1) involving the community members in role plays that are local to their place of residence, and 2) making use of the principle of positive deviance. Positive Deviance is an approach to behavioral and social change based on the observation that in any community, there are people whose

uncommon but successful behaviors or strategies enable them to find better solutions to a problem than their peers, despite facing similar challenges and having no extra resources or knowledge than their peers (Tuhus-Dubrow, November 29, 2009)

Future Studies

The findings and recommendations from this study can be used to modify existing programs or develop new programs and content to be delivered to all levels of program implementers. It can be piloted in one district, and further modified according to results observed. It can then be implemented in other districts. The new or modified program or content can help in reemphasizing the importance of counseling complementary feeding messages.

One of the barriers identified in this study was lack of motivation among the FLWs to counsel on complementary feeding. A study on how incentives to FLWs affect the complementary feeding message delivery can be useful in deciding on the extent of incentives to be given to FLWs. The study needs to also include how these incentives to FLWs translate into practice of complementary feeding recommendation by the households. The study should take into consideration the cost of incentives and compare it to the benefits. LQAS data can be used to select five districts or blocks that are performing similarly. In one group, non-monitory incentives like appreciations to high performing FLWs, giving them leadership opportunities and having best performer of the month contests, can be initiated. In the second group, small token of appreciation, like erasers, pencil, pens and candies can be given to high performers. The third group could have a combination of incentives for high performer, i.e. non monitory and small token of appreciations. In the fourth group, bigger monitory incentives or money can be given to

high performers. The fifth group will be the control group where no incentives would be introduced. This study will help analyze if incentives to FLWs are actually getting translated into better performance of their groups. It will also help to determine the extent of incentives required to boost the complementary feeding practices, and help in estimating return of investments on various types of incentives.

New avenues of delivering messages need to be explored. For example priests, religious leaders and respected elders of the communities can have an immense influence on a broader range or people, like fathers and mother-in-laws, in addition to mothers. These individuals can be partnered with to counsel these messages, and stir up conversations around complementary feeding. Starting with interviewing and focus group discussions with the identified individuals on what they feel about complementary feeding practices and how would they encourage practicing it in their communities, informal training programs can be developed. This can be followed with a study focused on what impacts this has on complementary feeding practices in the communities.

In this study questions on the respondent's caste were not asked. Since caste system is very prevalent in Bihar, more research needs to be done to understand how complementary feeding counseling messages are passed, received and practiced by people belonging to different castes.

This study is based on in-depth interviews conducted. More methods of collecting information can be used to strengthen analysis. For example, observing home visit, household practices, and HSC meeting, along with role plays can give greater insights into how the program implementers as well as the beneficiaries perceive IYCF.

Research Limitations

There were places in the interview where certain phrases or terms were unclear and did not have further explanation to it. For example, to identify undernourished children, the ANMs and FLWs follow a set of standard criteria. It was not clear from the interview what the criteria were. Also the respondents talked about weak new born and under nourished child. The age of the undernourished child was not mentioned in the interview making it challenging to understand whether the respondents are taking about children less than 6 months, from 6 to 24 months, or children more than 2 years. This could be improved by asking more probing questions like what do they mean by a weak child, what age children are they referring to when taking about under nourished child. Secondly, in some cases, especially for objective 3 where FLW and household interviews were considered, CARE staffs were used as translators. This could have resulted in biased answers from the respondents, as the HSC facilitators conducted training of FLWs HSC meetings. An unrelated translator should have been used in this case. The FLWs felt that we were evaluating their work, and so they feared that if they did not do well in the field, they will lose their job. On the other hand, the ANMs and CARE members did not feel that they will lose their job, and thus their responses were less biased.

Sometimes it seemed that the respondents answered as per what the interviewers wanted to hear. This could have resulted in not stating or understating some important issues and weaknesses, and overstating accomplishments.

Although the ROOs were aware of the complementary feeding recommendations that are discussed at the HSC meetings, they did not have information on complementary feeding counseling messages. This may be because the ROO do not personally conduct HSC meetings

and only occasionally conduct home visits to evaluate FLWs work, and provide counseling to the beneficiaries if the FLWs fail to do so. Since the interviews focused on understanding complementary feeding content across CARE staff and ANMs, no specific questions were asked to the ROOs regarding complementary feeding counseling messages. Also, the CARE staff was not probed on why they prioritize complementary feeding initiation as the most important.

Another limitation of this study is that the respondents were not asked about IYCF recommendations on breast feeding, and only emphasized on complementary feeding. The child should be fed breast milk along with complementary feeding.

Caste system is very prevalent in India, but this study did not take into consideration the caste the interviewees.

Lastly, in this study only one portion of the FLW and household interview was used to understand the perceived importance of IYCF recommendations at all levels. More details about actual understanding and practices will be covered in another study.

Research Strengths

Although the limitations made the study more challenging, the strengths of this study are very encouraging. One of the greatest strength of the study is that it looks at different levels of program implementation instead of just focusing on the beneficiaries and how they perceive IYCF. Also, the data used for this study was primary data, as it was collected and analyzed by the principal investigator. This helped maintain the quality of the findings as the results were interpreted based on the interview conducted as well as observatory findings from the field work. Additionally, since the author was a part of the study, it helped develop an initial understanding,

to identify and explain certain beliefs and behavior of the respondents as well as the people in the community.

The study used a qualitative approach to understand the gaps, barriers and opportunities related to IYCF across the program implementing members using in-depth interviews. It helped obtain rich information about the why and how the respondents perceive and understand IYCF counseling and practices. Since the data was based on respondents experiences, it was more descriptive and compelling compared to quantitative data (Anderson, 2010).

Conclusion

Complementary feeding was introduced at the HSC meetings 6 months prior to conducting the interviews, and in short time awareness about complementary feeding counseling had spread across CARE staff, ANMs and FLWs. However, complementary feeding counseling is still in its infancy and several gaps need to be filled to make this practice a common place in the households in Bihar. Complementary feeding practices need more focus at all levels including individual, family, interpersonal, community, organizational and policy level, as it can have long term positive effects on individual's health, future growth and development of the community.

The summary of key gaps and barriers of complementary feeding that were identified in this study are as follows:

1. **Poverty:** Bihar is one of the poorest states in India (Deccan Herald, 2012). Due to low incomes, families cannot afford feeding diverse foods, like fruits, meat and fish, to children. Also, some families cannot afford to buy soap, and thus are not able to maintain recommended hand hygiene when handling food.

2. **Cultural and Religious Traditions:** Since some families follow strict vegetarian diet, the child is not fed meat products. Secondly, the tradition of Annaprasana, sometimes delays the initiation of complementary feeding.

3. **Misconceptions:** Some families believe that complementary feeding is not required, as breast milk is enough for the child's nutrition. In fact, some believe that the child will fall sick, if fed anything else, as they do not have the capacity to digest food. Another misconception is that complementary feeding should only be given to undernourished children.

4. **Inconsistent Messages on Complementary Feeding:** There are discrepancies in the knowledge and counseling of on age of initiation, quantity, frequency, and food consistency messages across program implementers.

5. **Sense of Fear:** FLWs fear about their job security, which sometimes lead them to report incorrect findings. Also, there is risk to their lives as in some areas they fear that they will get beaten up.

6. **Lack of Motivation:** The FLWs are not given incentives to counsel on complementary feeding practices.

7. **Lack of Infrastructure and Resources for HSC meetings:** HSC meetings are less effective due to lack of required infrastructure to use audio visual aids. Also ANMs are not provided with required resources to make their meetings interesting.

The following is the summary of recommendations to improve the CARE IFHI program:

1. Emphasize on complementary feeding counseling in HSC and other meetings.
2. Emphasize the importance of counseling on complementary feeding to all children who belong to the age group, and not only under nourished children.
3. Encourage introduction of more programs organized by the government of Bihar, like the Annaprasana Day organized by the government of Gujarat.
4. Explain the long term benefits of complementary feeding.
5. Pass consistent and well defined complementary feeding messages to all program implementers. This can be done when training at the district, block as well as the HSC level.
6. All program implementers should be encouraged on the use of job aids, and proper reasoning on why each job aid like bowl and spoon, HVP, mobile kunji are important should be explained.
7. Provide non monitory incentives to the FLWs to counsel on complementary feeding.
8. Provide ANMs with required audio visual resources to help make HSC meetings more interesting.
9. Provide and demonstrate recipes to households to encourage feeding diverse food that is readily available in their house.
10. Emphasize the importance of hand washing in addition to using bowl and spoon.

11. Use positive deviance approach to bring behavioral change in the community to encourage complementary feeding practices.

REFERENCES

Anderson, C. (2010). Presenting and Evaluating Qualitative Research. *American Journal of Pharmaceutical Education, 74*(8), 1-7.

Avula, R., Menon, P., Saha, K. K., Bhuiyan, M. I., Chowdhury, A. S., Siraj, S., . . . Frongillo, E. A. (2013). A program impact pathway analysis identifies critical steps in the implementation and utilization of a behavior change communication intervention promoting infant and child feeding practices in Bangladesh. *J Nutr, 143*(12), 2029-2037. doi: 10.3945/jn.113.179085

Bhutta, Z. A., Das, J. K., Rizvi, A., Gaffey, M. F., Walker, N., Horton, S., . . . Black, R. E. (2013). Evidence-based interventions for improvement of maternal and child nutrition: what can be done and at what cost? *Lancet, 382*(9890), 452-477. doi: 10.1016/s0140-6736(13)60996-4

Black, R. E., Allen, L. H., Bhutta, Z. A., Caulfield, L. E., De Onis, M., Ezzati, M., . . . Rivera, J. (2008). Maternal and child undernutrition: global and regional exposures and health consequences. *The Lancet, 371*(9608), 243-260.

Bloomfield SF, N. K. (2009). Use of ash and mud for handwashing in low income communities. *An IFH expert review; published on http:// www.ifh-homehygiene.org*.

CARE India. (2011). *Establishing sub-centre level platform for effective health care service delivery through front line workers - A reference note for the initiative*. CARE-India.

CARE India. (2012, November). *Integrated Family Health Initiative*. Presented at PSC Meeting, Bihar, India.

CARE India. (2013). *LQAS Survey for Programme Managment - For mother of children aged 6-8 Month. Bihar, India.*

Deccan Herald. (2012, March 20). Bihar poorest state, says Plan panel. *Deccan Herald*. Retrieved from http://www.deccanherald.com/content/236097/bihar-poorest-state-says-plan.html

ICDS Gujarat. (2010). *Annaprashan Day : Introduction of complementary foods in the infant's feeding schedule*. Integrated Child Development Services Scheme, Women and Child Development Department, Government of Gujarat Retrieved from http://wcd.gujarat.gov.in/download/AnnaprashanGuidebook.pdf.

IIPS. (2008). National Family Health Survey (NFHS-3), India, 2005-06: Bihar. Mumbai: International Institute for Population Sciences (IIPS) and Macro International.

Laskar, M. S., Mahbub, M. H., & Harada, N. (2005). Effect of handwashing on child health. *The Lancet, 366*(9489), 893.

Laura E. Caulfield, S. A. R., Juan A. Rivera, Philip Musgrove, and Robert E. Black,. (2006). Stunting, Wasting, and Micronutrient Deficiency Disorders. In B. J. Jamison DT, Measham AR, et al. (Ed.), *Disease Control Priorities in Developing Countries* (2nd ed.). Washington, DC: World Bank.

Lim, S. S., Vos, T., Flaxman, A. D., Danaei, G., Shibuya, K., Adair-Rohani, H., . . . Ezzati, M. (2012). A comparative risk assessment of burden of disease and injury attributable to 67 risk factors and risk factor clusters in 21 regions, 1990-2010: a systematic analysis for the Global Burden of Disease Study 2010. *Lancet, 380*(9859), 2224-2260.

Marriott, B. P., White, A., Hadden, L., Davies, J. C., & Wallingford, J. C. (2012). World Health Organization (WHO) infant and young child feeding indicators: associations with growth measures in 14 low-income countries. *Matern Child Nutr, 8*(3), 354-370. doi: 10.1111/j.1740-8709.2011.00380.x

Menon, P. e. (2013). A program impact pathway analysis identifies critical steps in the implementation and utilization of a behavior change communication intervention promoting infant and child feeding practices in Bangladesh. *J Nutr, 143*(12), 2029-2037. doi: 10.3945/jn.113.179085

Priest Pradeep Sharma. (2012). Hindu Priest in Melbourne: Annaprasana. from http://www.hindupriestinmelbourne.com/annaprasana.html

Seth, V., & Garg, A. (2011). Complemtary feeding of infants and young children. In Sheila Chander Vir (Ed.), *Public Health Nutrition in Developing Countries, Part 1* (pp. 224): Woodhead Publishing India Pvt Ltd.

Sinha, N. (2012, October 15). Malnutrition on the rise in Bihar: Report. *The Times of India*. Retrieved from http://timesofindia.indiatimes.com/city/patna/Malnutrition-on-the-rise-in-Bihar-Report/articleshow/16815588.cms

The Hungama Survey Report. (2011). Hungama: Fighting Hunger and Malnutrition. Retrieved from http://www.naandi.org/CP/HungamaBKDec11LR.pdf

Tuhus-Dubrow, R. (November 29, 2009). The Power of Positive Deviants: A promising new tactic for changing communities from the inside. *Boston Globe*.

UNICEF. (2014). Infant and Young Child Feeding. from http://www.unicef.org/nutrition/index_breastfeeding.html

Vir, S. C., & Kotecha, P. V. (2011). Iron deficiency and iron deficiency anemia in younger children. In Sheila Chander Vir (Ed.), *Public Health Nuutrition in Developing Countries Part 2* (pp. 644-648): Woodhead Publishing India Pvt Ltd.

APPENDICES

Tool 1: In-Depth Interview Guide for ROO and BC

	PURPOSE	
	1. To assess what ROO and BC perceive as the most successful programs that address IYCF. 2. To understand ROO and BC perceived value of HSC IYCF trainings and materials. 3. To understand the strategies and key challenges ROO and BC encountered during the IYCF HSC roll out.	
	TARGET PARTICIPANTS	
	1 ROO in each of two districts identified and 1 BC in each of four blocks identified	
	INTRODUCTION	
	Hello, my name is _____, and this is my colleague_____. We are both working with CARE India and Emory University in the United States of America to identify effective ways to address under nutrition among pregnant women, breastfeeding mothers, and children up to 2 years of age. We are hoping to learn more about your experience with infant and young child feeding, including the strategies you use and key challenges you face implementing programs. From this information, we will be able to work together to better improve child nutrition and health in this community. Participation in this interview is voluntary, and you may refuse to answer any questions or decide to finish the interview at any time.	मैं पहले आपको धन्यवाद देना चाहती हुं कि आपने हमसे बात-चीत करने के लिए समय दिया. मेरा नाम ----- हैं और ये मेरी सहयोगी ------ हैं. हम दोनों CARE India और अमेरीका के एमोरी विश्वविद्यालय के विधार्थी हैं. हम यहां 2 साल तक के बच्चों में कुपोषण की समस्या पर शोध के लिये जानकारी लेने आए है. हम आपसे बच्चो के खाने-पीने की जानकारी संबंधित कार्यक्रमों को लागु करने में इस्तेमाल किये गये तरीकों और इन कार्यक्रमों को लागू करते समय आने वाली दिक्कत्तो के बारे में जानना चाहेंगे। हम इन सब की आपसे जानकारी प्रप्त करके कुछ शीख

	I would like to remind you that any information you share today will remain completely confidential and will only be shared with members of the research team. During the interview, _____ will be taking notes. We would also like to record this interview so that we don't miss anything that you have to say. The recording will be safely stored and nobody outside the research team will have access to the recording. There will be no way to identify you later. Is it okay with you if we record our conversation? Thank you for your consent. Before we begin, I just want to remind you that there is no such thing as "right" or "wrong" information. We are interested in hearing about your personal experiences, opinions, and views, so please respond as openly as you wish. We are excited to learn from you and know that your perspectives will be extremely valuable in improving the program to make it more suitable to you and the community's needs. The interview should last approximately one hour. Are there any questions before we begin?	सखे. यह जानकारी के ध्वारा, हम सब साथ मिलकर, इस समाज मे शीशु पोषन मे कुछ सुधार ला सके. इस बात-चीत के लिए राजी होना पूरी तरह आप पर निर्भर हैं और हम आपके मर्जी से ही आगे बढेंगे. और किसि भि समय आप को कोइ सवल का उत्तर नहि देना हो, तो आप मुझे साफ मना कर सकती है. मैं आपको यह कहना चाहता हूँ कि हमारी बींच कि सभी बात-चीत सिर्फ हमारे बींच रहेंगी. हमारे बात-चीत के दौरान यह (note-taker) नोट करते रहेंगे. क्योंकि आपके द्वारा कही गई बातों को हम छोडना या भूलना नहीं चाहते है. इस लिए हम इस बात-चीत को record भी करना चाहते हैं. हम इस recording को सुरक्शित रखेंगे और हमारे team को छोड कर कोई भी यह बात-चीत नहीं सुनेंगे. और आपका या आपके घरवालो का नाम कभी भी नहीं लिया जाएगा. क्या इस recording के लिए आप सहमत हैं? ईस्से पहले कि हम शुरु करे मैं आपको यह कहना चाहूँगा कि आप खुल के बात करें. यहा हम कुछ सही या गलत देखने नहीं आए हैं. आपके विचार और आपकि जानकारी हमारे लिए बहूत

		महत्व्पूर्ण हैं. इस बत-चीत के लिए लगभग 1-1.5 घंटा लगेगा. शुरु करने से पहले कोई सवाल ?
	WARM UP – We would like to know more about your work as a ROO/BC?	हम आपके काम के बारे मे और जानकारी प्रप्त करना चाहेगे.
1.	Can you describe your overall roles and responsibilities as a ROO/BC? Probe: One thing that you really like? Probe: One thing that you dislike? Probe: What are the challenges?	आप एक ROO/BC के रूप में अपने भूमिका और जिम्मेदारियों का वर्णन कर सकते हैं? Probe: एक बात जो आपको आपके काम के बारे मे पसंद है? Probe: एक बात जो आपको आपके काम के बारे मे नापसंद है? Probe: आपको किन चुनौतियो का सामना करना पदता है?
2.	What interested you to become a ROO/BC? Probe: Is being a ROO/BC what you thought it would be like? Why/why not?	ऐसि कोंनसि बात है जिसकि वजह से आप ROO/BC बने? Probe: जैसे आपने सोचा था क्या आपका काम वैसे है? क्यो/ क्यो नहि?
	IYCF PROGRAMS – Thank you for sharing. Let's talk more about child nutrition in your community.	आपके विचर हमरे साथ बातने के लिये धनियवाद. अब हम आपके समाज मे, बच्चो के पोषन के बारे मे बात करेगे.
3.	What are the main programs/activities that you are aware of in this district/block that focus on improving young child nutrition? (This is other than the CARE	केयर के अलावा आपके district/block मे आप किन कार्यक्रमों और गतिविधियों के बारे मे जानते है, जो बच्चे का पोषन पर काम

	IFHI activities) Probe: how they know about these programs or what have they heard about them in the field? Probe: How would you prioritize the programs? Probe: Which have been most successful and how? Probe: How the program has been implemented and its reach?	कर रहे है? Probe: आप को इन programs के बारे मे कैसे पत? क्या सुना है? Probe: आपके हिसाब से कौन से programs ज्यादा जरूरी है? Probe: कौन से program सबसे ज्यादा सफल है? कैसे? Probe: यह program किस तरह लागु हुआ? और उसकि पहुच?
4.	Specifically, in the IFHI program, can you describe the interventions to address the issues of child nutrition? Probe: Different activities that touch on nutrition? Probe: Name them. Probe: How the program has been implemented and its reach?	IFHI program मे, बच्चे के पोषन पर क्या गतिविधिया या काम हुये है, क्या आप इस का वर्णन कर सकते है? Probe: IFHI program में कौनसी विभिन्न गतिविधियां हैं जो पोषन से संबंदीत है? Probe: उनके नाम? क्या आप उनका वर्णन कर सक्ते है? Probe: यह program किस तरह लागु हुआ? और उसकि पहुच?
5.	Can you describe how you work on child nutrition currently in your role? Probe: HSC platform? Probe: Main challenges? How do you overcome these challenges or what are	बच्चे के पोषन पर जो काम चल रहा है, इस मे आपकी क्या भूमीका है? Probe: See if they mention HSC level or any other platforms.

	possible solutions for overcoming these challenges?	Probe: ये सब करने में आपको क्या दिक्क्तें आती हैं और इन दीकत्तो का समाधान क्या होना चाहीए?
	HSC ROLL OUT – Let's discuss the HSC roll out that was implemented recently.	अब हम हाल ही मे जो HSC roll out हुआ उस पर बात करेंगे।
6.	Can you describe some of the HSC meetings that took place in your blocks/block related to young child feeding? Probe: When did they take place? Probe: What topics were covered? Probe: What was the FLW engagement like? (ASHA, AWW, ANM?) Probe: What worked? What did not work? Why?	आप के blocks/block मे, बच्चो के खाने-पीने के विषय पर जो HSC meetings होती है, उस के बारे मे बताईए? Probe: Meetings कब थी? Probe: कौनसे विषय पर थी? Probe: FLW का इस meetings मे क्या कार्या रहा है? (ASHA, AWW, ANM?) इन मीटींगस मे F.L.W का अनुभव कैसा रहा (दिलचस्पी, attendance, etc.) Probe: एसा क्या काम है, जो अच्छा चला? क्या नही चला? क्यो?
7.	What were the key challenges encountered during the HSC roll out? Probe: Were these challenges overcome? How? Probe: Other possible solutions?	HSC roll out के समय आपको कीन दीकत्तो का सामना करना पधा? Probe: क्या इन दीकत्तो पर आप काबू पा सके? कैसे? Probe: अन्य संभावित समाधान?
8.	What impact did the HSC roll out have on the quality of counseling in this district/ block? Probe: Was it effective? Why/why not?	बच्चो के पोषन पर आपके district/block मे HSC roll out का परामर्श की गुणवत्ता पर क्या प्रभव पधा?

	Probe: What worked well? Probe: How did FLWs perceive trainings? Probe: Would something else have been better? What?	Probe: प्रभवी था? क्यो/ क्यो नही? Probe: क्या अच्छे से चला? Probe: FLWs इस trainings को किस तरह समझे? Probe: HSC roll के अलावा, एसा और क्या है, जो बच्चे के पोषन पर प्रभव ला सकता है?
9.	What impact did the HSC roll out have on the use of job aids (Mobile Kunji, Katori, home visit planner) in this district/ block? Probe: For what purpose are the job aids being used? Counseling? • If yes, is it effective in making counseling more effective • if not, why not effective/using it Probe: Who is using these aids?	बच्चो के पोषण पर आपके district/block मे HSC roll का Mobile Kunji, Katori, home visit planner के इस्तमाल करने से क्या प्रभव पधा? Probe: Mobile Kunji, Katori, home visit planner किस के लिए इस्तमाल होते है? सलाह देने के लिए? • If yes, क्या यह समाज मे सलाह देने मे काम आ रहा है? • If not, क्यो प्रभावी नहि है? क्यो इस का इस्तमाल नहि हो रहा? Probe: इन चीजो का कौन इस्तमाल करता है?
10.	What impact did the HSC roll out have in motivating the FLWs to go for home visits? Probe: Approximately how many home visits were done before the HSC roll out, about IYCF/CF? Probe: Approximately how many home visits	बच्चो के पोषण पर आपके district/block मे HSC roll ने FLWs को घर की यत्रा करने के लीए किस तरह प्रोत्साहित क्या? Probe: HSC roll out से पहले, IYCF/CF से संबंधीत कीतने घर की यत्रा FLWs ने की?

	are done now i.e. after the HSC roll out, about IYCF/CF? Probe: Are there perceived differences on who is making the home visits- ASHA/ AWW? Probe: Has there been an increase in number of home visits about IYCF/CF? • If yes, what motivated the FLW's to visit homes?	Probe: HSC roll out के बाद, IYCF/CF से संबंधीत कीतने घर की यत्रा FLWs ने की? Probe: ASHA/ AWW मे से कौन home visits करता है, इस मे कोइ अंतर? Probe: कोइ बधाव? • If yes, FLW's को घरो की यत्रा करने के लिए, क्या प्रेरित किय?
	IYCF CONTENT – Let's talk more about some of the content that was covered during the HSC meetings.	अब हम HSC meetings मे cover की गई चीजो पर बात करेगे.
	When it comes to child feeding, you may have heard the following messages are usually recommended for mothers (For each message, stop and ask if these messages were covered in the HSC meetings in detail or is just mentioned. Is it difficult for the FLW's to council on?): • Begin to introduce cereal-based semi-solid foods after 6 months • Feed age-appropriate quantity to the child (2 small katori, 2-3 time/day - 6 to 8 months, 3 katori , 3-4 times/day, – 9 to 12 months, 3 katori, full day– 12 to 24 months+ snacks) • Feed age-appropriate frequency to the child (2-3 times in a day, and for 9-24 month children	• जब हम बच्चो के खाने की बात करते है, छोटे बच्चे के मा को यह सलाह दी जाती है, क्या आपने ये सिफारिश सुनि होगि. (For each message, stop and ask if this message was covered in the HSC meetings in detail or is just mentioned. Is it difficult for the FLW's to council on?): • 6 महिने से बच्चो को अनाज अर्द्ध ठोस आहार के रूप मे देना चाहिये • खाने की मात्रा बच्चे की उमर के हीसाब से देना चाहीये (2 small katori, 2-3 time/day - 6 to 8 months, 3 katori , 3-4 times/day, – 9 to 12 months, 3 katori, full day– 12 to 24 months+ snacks) • ब्च्चो को आहार दिनभर मे उनके उमर के हीसाब से देना

	include snacks between meals as well) • Feed thick semi-solid food • Wash your hands/child's hands before preparing food and serving food to the child • Feed a variety of foods to the child using different ingredients available at home – cereals, vegetables, meat, dairy, fats/oils fruits, legumes etc. • Engage in responsive feeding by being sensitive to hunger cues, feeding slowly and patiently, encouraging the child to eat, minimizing distractions, and making eye contact.	चाहीये (2-3 times in a day, and for 9-24 month children include snacks between meals as well) • खाना घाढा अर्द्ध ठोस दे • खाना बनाने और खिलाने से पहले अपना और अपने बच्चे का हाथ धोना • बच्चे को वीभिन प्रकार का खाना खिलाईये, जैसे अनाज, सब्जि, मास, दुध, फल, घी, दाल, एत्यादि **बच्चे को खाना खीलाने का तरीका:** • भूख को समझना है. बच्चे को आरमसे और धीरजसे खिलति है. बच्चा अगर नहि खात, तो उसे खाने के लिया प्रोत्सहित करति है, बच्चेकी व्याकुलता को कम करति है, और बच्चे के साथ आखो मे आखे मीलाकर बात करति है
11.	Which of the above do you feel is the most important thing for the community to follow in terms of child feeding? Probe: Why? Probe: Do you think that mothers are able to follow this? If no, why not?	बच्चे के पोषन से संबंदीत, इन मे से कौनसी सलाह, आप के हीसाब से, आपके सामज मे अपनाना ज्यादा जरूरी है? Probe: क्यो? Probe: आप को लगता है, की आपके समाज की मा इन का पालन करेगी? If no, why not?
12.	Which of the above recommendations do you think are most challenging for households to adopt? Probe: What do you think can be done to overcome these?	इन सलाह मे से कौनसी सलाह, इस समाज के घरो मे अपनाना , सबसे चुनौतीपूर्ण लगता है? Probe: इनका सामना आप कैसे करेंगे?

13.	Which of the above recommendations do you think are the easiest for households to adopt? Probe: Why?	इन सलाह मे से कौनसी सलाह, इस समाज के घरो मे अपनाना, सबसे आसान है? Probe: क्यो?
	CONCLUDING QUESTIONS – I am going to wrap up with a few closing questions.	
14.	How else can we reach out to women/families/beneficiaries in this community? Probe: Home visits vs. Group meetings? Probe: Benefits and drawbacks to both? Probe: VHSND? Probe: any other	और किन तरीको से हम इस समाज की महीलाओ/ परीवारो तक पहुंच सकते है? Probe: उनके घर जाकर vs. समूह की बैठकों रखकर? Probe: ऐसे करने का फयदा और नुकसान? Probe: VHSND (Village Hand Sanitation and Nutrition Day)? Probe: और कोइ?
15.	What other ways could mothers and families be educated about infant and young child feeding? Probe: Informational materials given directly to the household?	और कौन से तरीके है, जिसके ध्वारा हम समाजकी मॉ को शीशु पोषन और खाने के बारे मे समजा सकते है? Probe: सूचनात्मक चीझ सीधे घरोतक पहुचान?
16.	What other interventions do you think we (CARE) can do to improve young child nutrition in this community? Probe: Why?	बच्चे के पोषन मे सूधार लाने को लिए, एसे और कौनसी चीज है, जो हम (CARE) आप के समाज मे कर सकते है? Probe: क्यो?
17.	Is there anything else you would like to share with us about anything we talked about today?	आज जो विषय पर हमने बात की, उस पर आप हमें और कुछ बताना या पूछना चाहेंगे ?

	Thank you so much for your time and contribution to our research project. We have learned a lot from you today. We hope to work together to effectively improve nutrition and health among infants and young children in this community.	आपके कीमती समय और बात-चीत के लिए धन्यवाद. आज हमने आपसे बहुत कुछ सिखा है. आशा है की हम सब साथ मिलकर शीशु पोषनमे सुधार लाने के लिए और तंदरुस्त शीशु की संखीया बडाने के लिए काम करेंगे.

Tool 2: In-Depth Interview Guide for HSC Facilitator

	PURPOSE	
	1. To understand HSC Facilitator experience leading HSC trainings and understanding of IYCF content. 2. To understand the strategies and key challenges HSC Facilitator encounter when training ANM and FLW.	
	TARGET PARTICIPANTS	
	1 HSC Facilitator in each of four blocks identified	
	INTRODUCTION	
	Hello, my name is _____, and this is my colleague_____. We are both working with Emory University in the United States of America to identify effective ways to address under nutrition among pregnant women, breastfeeding mothers, and children up to 2 years of age. We are hoping to learn more about your experience with infant and young child feeding, including your thoughts about the health sub-center trainings, as well as the key strategies you use and challenges you face training auxiliary nurse midwives and frontline workers. From this information, we will be able to work together to better improve the health sub-center platform in this community in order to improve child nutrition and health. Participation in this interview is voluntary, and you may refuse to answer any questions or decide to finish the interview at any time. There are no penalties or	मैं पहले आपको धन्यवाद देना चाहती हुं कि आपने हमसे बात-चीत करने के लिए समय दिया. मेरा नाम ----- हैं और ये मेरी सहयोगी ------ हैं. हम दोनों CARE India और अमेरीका के एमोरी विश्वविद्यालय के विधार्थी हैं. हम यहां 2 साल तक के बच्चों में कुपोषण की समस्या पर शोध के लिये जानकारी लेने आए है. हम आशा करते है की हम आप के पास जो बच्चो के खाने-पीने के संबंधित जो जानकारी है, health sub-center trainings को लेकर , आप के विचर, आप किन तरीको का इस्तमाल करते हो और ANM ASHA, AWW की training करते समय आपको किन दीकत्तो का सामना करना पधता है, हम इन सब की आपसे जानकारी प्रप्त करके कुछ शीख सखे. यह जानकारी के ध्वारा, हम

	consequences of any kind if you decide that you do not want to participate. I would like to remind you that any information you share today will remain completely confidential and will only be shared with members of the research team. During the interview, _____ will be taking notes. We would also like to record this interview so that we don't miss anything that you have to say. The recording will be safely stored and nobody outside the research team will have access to the recording. There will be no way to identify you later. Is it okay with you if we record our conversation? Thank you for your consent. Before we begin, I just want to remind you that we are not testing you in any way and there is no such thing as "right" or "wrong" information. We are interested in hearing about your personal experiences, opinions, and views, so please don't feel shy and respond as openly as you wish. We are excited to learn from you and know that your perspectives will be extremely valuable in improving the program to make it more suitable to you and the community's needs. The interview should last approximately one hour. Are there any questions before we begin?	सब साथ मिलकर, इस समाज मे health sub-center के level पर कुछ सुधर ला सके, और इस के द्वरा शीशु पोषन मे कुछ सुधार ला सके. इस बात-चीत के लिए राजी होना पूरी तरह आप पर निर्भर हैं और हम आपके मर्जी से ही आगे बढेंगे. और किसि भि समय आप को कोइ सवल का उत्तर नहि देना हो, तो आप मुझे साफ मना कर सकती है. मैं आपको यह कहना चाहता हूँ कि हमारी बींच कि सभी बात-चीत सिर्फ हमारे बींच रहेंगी. हमारे बात-चीत के दौरान यह (note-taker) नोट करते रहेंगे. क्योंकि आपके द्वारा कही गई बातों को हम छोडना या भूलना नहीं चाहते है. इस लिए हम इस बात-चीत को record भी करना चाहते हैं. हम इस recording को सुरक्शित रखेंगे और हमारे team को छोड कर कोई भी यह बात-चीत नहीं सुनेंगे. और आपका या आपके घरवालो का नाम कभी भी नहीं लिया जाएगा. क्या इस recording के लिए आप सहमत हैं? ईस्से पहले कि हम शुरु करे मैं आपको यह कहना चाहूँगा कि आप खुल के बात करें. यहा हम कुछ सही या गलत देखने नहीं आए हैं. आपके विचार और आपकि जानकारी हमारे लिए बहूत

		महत्व्पूर्ण हैं. इस बत-चीत के लिए लगभग 1-1.5 घंटा लगेगा. शुरु करने से पहले कोई सवाल ?
	WARM UP – We would like to know more about your work as a HSC Facilitator?	हम आपके काम के बारे मे और जानकारी प्रप्त करना चाहेगे.
1.	Can you describe your overall roles and responsibilities as a HSC facilitator? Probe: One thing that you really like? Probe: One thing that you dislike?	आप एक HSC facilitator के रूप में अपने भूमिका और जिम्मेदारियों का वर्णन कर सकते हैं? Probe: एक बात जो आपको आपके काम के बारे मे पसंद है? Probe: एक बात जो आपको आपके काम के बारे मे नापसंद है?
2.	What interested you to become a HSC facilitator? Probe: Is being a HSC facilitator what you thought it would be like? Why/why not?	ऐसि कोंनसि बात है जिसकि वजह से आप HSC facilitator बने? Probe: जैसे आपने सोचा था क्या आपका काम वैसे है? क्यो/ क्यो नहि?
3.	How is your experience working with others? Probe: ASHAs, AWWs, ANMs? Probe: How do you work together? Probe: What are the challenges? What makes it difficult/easy to work together?	दुसरो के साथ काम करने का आपका क्या अनुभव है? Probe: ANM's, आश, अंगंवादि कार्यकर्त, के साथ काम कर्ने का अनुभव? Probe: आप एक दुसरे के साथ कैसे और किस तरहा काम करते है? Probe: एक दुसरे के साथ काम करते समय आपको किस

		चुनौतियो का सामना करना पड़्ता है? क्या है जो एक साथ काम करना मुशकिल करता है? क्या है जो एक साथ काम करना आसान करता है?
	HSC TRAININGS – Thank you for sharing. Let's talk more about the HSC trainings.	आपके विचर हमरे साथ बातने के लिये धनियवाद. अब हम HSC trainings के बारे मे बात करेगे.
4.	Who takes HSC meetings?	HSC meetings कौन लेता है**?**
5.	What do you feel were the most important topics you covered during the HSC trainings regarding maternal/child health? (Note if nutrition comes up) Probe: Why?	HSC trainings के वक्त आप ने मा और बच्चे के स्वास्थ्य को लेकर, किन विषय पर trainings दी है? (Note if nutrition comes up) Probe: क्यो?
6.	How was your experience leading the HSC trainings? Probe: Did you feel prepared? Why/why not? Probe: How did the FLWs and ANMs respond? Probe: Main challenges? How were these overcome? Probe: What has worked well? Probe: What would improve the trainings?	HSC trainings को नेतृत्व करते समय/ मे आगे होने का आपके क्या अनूभव है? Probe: क्या आप यहा meeting लेने को ready थे? क्यो/ क्यो नहि? Probe: FLWs and ANMs को यह training कैसि लगी? Probe: दीकत्ते? कैसे सामना किय? Probe: क्या अच्छा लग? Probe: आप trainings मे किस तरह सुधार ला सकते है?
7.	What tools and activities did you use while leading	Training लेते समय आप ने किन चीजो या किन कार्याक्रम का

	trainings? Probe: Why? Probe: Demonstrations? Probe: Role-playing?	इस्तमाल किय? Probe: प्रदर्शनों, नाट्क? Probe: क्यो?
	IYCF CONTENT- Now let's discuss child nutrition.	अब हम बच्चो के पोषन के बारे मे बात करेगे.
8.	Can you describe some of the HSC meetings that you or the ANM has led related to child feeding? Probe: When did they take place? Probe: What topics were covered? Probe: What was the FLW engagement like? (ASHA, AWW, ANM?) Probe: What is the role of the ANM during the meeting? How frequently does she lead the meeting? Probe: What worked? What did not work? Why? What are the block level variations?	बच्चे के खाने-पीने के विषय पर आपने या ANM ने जो HSC meetings ली है, उस के बारे मे बताईये? Probe: कब हुइ थी? Probe: कौन से विषय पर? Probe: FLW का क्या कार्य थ? (ASHA, AWW, ANM?) Probe: Meeting के वक्त, ANM दिदि का क्या किरदार है? Probe: क्या चला? क्या नहि चला? क्यो? What are the block level variations?
	When it comes to child feeding, you may have heard the following messages are usually recommended for mothers (For each message, stop and ask if these messages were covered in the HSC meetings in detail or were they just mentioned? Which is the most difficult for the FLW's to council on?):	जब हम बच्चो के खाने की बात करते है, छोटे बच्चे के मा को यह सलाह दी जाती है, क्या आपने ये सिफारिश सुनि होगि. (For each message, stop and ask if these messages were covered in the HSC meetings in detail or were they just mentioned? Which is the most difficult for the FLW's to council on?):

	• Begin to introduce cereal-based semi-solid foods after 6 months • Feed age-appropriate quantity to the child (2 small katori, 2-3 time/day - 6 to 8 months, 3 katori , 3-4 times/day, – 9 to 12 months, 3 katori, full day– 12 to 24 months+ snacks) • Feed age-appropriate frequency to the child (2-3 times in a day, and for 9-24 month children include snacks between meals as well) • Feed thick semi-solid food • Wash your hands/child's hands before preparing food and serving food to the child • Feed a variety of foods to the child using different ingredients available at home – cereals, vegetables, meat, dairy, fats/oils fruits, legumes etc. • Engage in responsive feeding by being sensitive to hunger cues, feeding slowly and patiently, encouraging the child to eat, minimizing distractions, and making eye contact.	• 6 महिने से बच्चो को अनाज अर्द्ध ठोस आहार के रूप मे देना चाहिये • खाने की मात्रा बच्चे की उमर के हीसाब से देना चाहीये (2 small katori, 2-3 time/day - 6 to 8 months, 3 katori , 3-4 times/day, – 9 to 12 months, 3 katori, full day– 12 to 24 months+ snacks) • ब्च्चो को आहार दिनभर मे उनके उमर के हीसाब से देना चाहीये (2-3 times in a day, and for 9-24 month children include snacks between meals as well) • खाना घाढा अर्द्ध ठोस दे • खाना बनाने और खिलाने से पहले अपना और अपने बच्चे का हाथ धोना • बच्चे को वीभिन प्रकार का खाना खिलाईये, जैसे अनाज, सब्जि, मास, दुध, फल, घी, दाल, एत्यादि **बच्चे को खाना खीलाने का तरीक:** • भूख को समझना है. बच्चे को आरमसे और धीरजसे खिलति है. बच्चा अगर नहि खात, तो उसे खाने के लिया प्रोत्सहित करति है, बच्चेकी व्याकुलता को कम करति है, और बच्चे के साथ आखो मे आखे मीलाकर बात करति है
9.	Which of the above do you feel is the most important thing for the community to follow in terms of child feeding? Probe: Why?	बच्चे के पोषन से संबंदीत, इन मे से कौनसी सलाह, आप के हीसाब से, आपके सामज मे अपनाना ज्यादा जरूरी है? Probe: क्यो?

	Probe: Do you think that mothers are able to follow this? If no, why not?	Probe: आप को लगता है, की आपके समाज की मा इन का पालन करेगी? If no, why not?
10.	Which of the above recommendations do you think are most challenging for households to adopt? Probe: What do you think can be done to overcome these?	इन सलाह मे से कौनसी सलाह, इस समाज के घरो मे अपनाना , सबसे चुनौतीपूर्ण लगता है? Probe: इनका सामना आप कैसे करेंगे?
11.	Which of the above recommendations do you think are the easiest for households to adopt? Probe: Why?	इन सलाह मे से कौनसी सलाह, इस समाज के घरो मे अपनाना, सबसे आसान है? Probe: क्यो?
12.	What were the main concerns raised by FLWs and ANMs regarding child feeding practices?	FLWs and ANMs को बच्चो के खाने-पीने की प्रथाओ को लेकर क्या मुख्य चिंताए है?
	CONCLUDING QUESTIONS – I am going to wrap up with a few closing questions.	
13.	How do the FLWs respond to the training messages delivered from you compared to the training messages delivered form ANMs? Probe: Difference? Why?	ANM के मुकाबले आपकी सलाह/ training messages, FLWs किस तरह समझते है? Probe: कोइ अंतर? क्यु?
14.	Is there anything else you would like to share with us about anything we talked about today?	आज जो विषय पर हमने बात की, उस पर आप हमें और कुछ बताना या पूछना चाहेंगे ?
	Thank you so much for your time and contribution to our research project. We have learned a lot from you today. We hope to work together to effectively improve nutrition and health among infants and young	आपके कीमती समय और बात-चीत के लिए धन्यवाद. आज हमने आपसे बहुत कुछ सिखा है. आशा है की हम सब साथ मिलकर

	children in this community.	शीशु पोषनमे सुधार लाने के लिए और तंदरुस्त शीशु की संखीया बडाने के लिए काम करेंगे.

Tool 3: In-Depth Interview Guide for ANM

	PURPOSE	
	1. To understand ANM understanding of IYCF content and perceived value of training and materials. 2. To understand the strategies and key challenges ANM encounter when receiving training from HSC Facilitator and when training FLWs.	
	TARGET PARTICIPANTS	
	1 ANM in each of four blocks identified	
	INTRODUCTION	
	Hello, my name is _____, and this is my colleague _____. We are both working with Emory University in the United States of America to identify effective ways to address under nutrition among pregnant women, breastfeeding mothers, and children up to 2 years of age. We are hoping to learn more about your experience with infant and young child feeding, including your thoughts about the trainings and materials that have been provided to you, as well as the key strategies you use and challenges you face counseling mothers. From this information, we will be able to work together to better improve the information given to you and to families in this community in order to improve child nutrition and health. Participation in this interview is voluntary, and you	मैं पहले आपको धन्यवाद देना चाहती हुं कि आपने हमसे बात-चीत करने के लिए समय दिया. मेरा नाम ----- हैं और ये मेरी सहयोगी ------ हैं. हम दोनों CARE India और अमेरीका के एमोरी विश्वविद्यालय के विधार्थी हैं. हम यहां 2 साल तक के बच्चों में कुपोषण की समस्या पर शोध के लिये जानकारी लेने आए है. हम आपसे बच्चो के खाने-पीने की जानकारी संबंधित कार्यक्रमों में इस्तेमाल किये गये तरीकों और इन कार्यक्रमों को समाज की मा पर इस्तमाल करते समय आने वाली दिक्कत्तो के बारे में जानना चाहेंगे। हम इन सब की आपसे जानकारी प्रप्त करके कुछ शीख सखे. यह जानकारी के ध्वारा, हम सब साथ मिलकर, इस

	may refuse to answer any questions or decide to finish the interview at any time. There are no penalties or consequences of any kind if you decide that you do not want to participate. I would like to remind you that any information you share today will remain completely confidential and will only be shared with members of the research team. During the interview, _____ will be taking notes. We would also like to record this interview so that we don't miss anything that you have to say. The recording will be safely stored and nobody outside the research team will have access to the recording. There will be no way to identify you later. Is it okay with you if we record our conversation? Thank you for your consent. Before we begin, I just want to remind you that we are not testing you in any way and there is no such thing as "right" or "wrong" information. We are interested in hearing about your personal experiences, opinions, and views, so please don't feel shy and respond as openly as you wish. We are excited to learn from you and know that your perspectives will be extremely valuable in improving the program to make it more suitable to you and the community's needs. The interview should last approximately 1 hour. Are there any questions before we begin?	समाज मे शीशु पोषन मे कुछ सुधार ला सके. इस बात-चीत के लिए राजी होना पूरी तरह आप पर निर्भर हैं और हम आपके मर्जी से ही आगे बढेंगे. और किसि भि समय आप को कोइ सवल का उत्तर नहि देना हो, तो आप मुझे साफ मना कर सकती है. मैं आपको पहले यह कहना चाहता हूँ कि हमारी बींच कि सभी बात-चीत सिर्फ हमारे बींच रहेंगी. हमारे बात-चीत के दौरान यह (note-taker) नोट करते रहेंगे. क्योंकि आपके द्वारा कही गई बातों को हम छोडना या भूलना नहीं चाहते है. इस लिए हम इस बात-चीत को record भी करना चाहते हैं. हम इस recording को सुरक्शित रखेंगे और हमारे team को छोड कर कोई भी यह बात-चीत नहीं सुनेंगे. और आपका या आपके घरवालो का नाम क्भी भी नहीं लिया जाएग. क्या इस recording के लिए आप सहमत हैं? ईस्से पहले कि हम शुरु करे मैं आपको यह कहना चाहूँगा कि आप खुल के बात करें. यहा हम कुछ सही या गलत देखने नहीं आए हैं. आपके विचार और आपकि जानकारी हमारे लिए बहूत महत्व्पूर्ण हैं. इस बत-चीत के लिए लगभग 1-1.5 घंटा लगेगा.

		शुरु करने से पहले कोई सवाल ?
	WARM UP: We would like to know more about your work as an ANM.	
1.	Can you describe your overall roles and responsibilities as an ANM? Probe: One thing that you really like? Probe: One thing that you dislike?	आप एक ANM के रूप में अपने समग्र भूमिका और जिम्मेदारियों का वर्णन कर सकते हैं? Probe: एक बात जो आपको आपके काम के बारे मे पसंद है? Probe: एक बात जो आपको आपके काम के बारे मे नापसंद है?
2.	What interested you to become an ANM? Probe: Is being an ANM what you thought it would be like? Why/why not?	ऐसि कोंनसि बात है जिसकि वजह से आप ANM बने? Probe: जैसे आपने सोचा था क्या आपका काम वैसे है? क्यो/ क्यो नहि?
3.	How is your experience working with others? Probe: Other ANMs, ASHAs, AWWs, Lady Supervisor, HSC Facilitator? Probe: How do you work together? Probe: What are the challenges? What makes it difficult/easy to work together?	दुसरो के साथ काम करने का आपका क्या अनुभव है? Probe: दुसरे ANM's, आश, अंगंवादि कार्यकर्त, Lady Supervisor, HSC Facilitator के साथ काम कर्ने का अनुभव? Probe: आप एक दुसरे के साथ कैसे और किस तरहा काम करते है? Probe: एक दुसरे के साथ काम करते समय आपको किस चुनौतियो का सामना करना पड्ता है?

		Probe: एक साथ काम करने मे आपको किन कठिनाईयो का सामना करना पड़ता है? Probe: एक साथ काम करने मे आसनि?
	NUTRITION SERVICES – Thank you for sharing. Let's talk more about child nutrition services available in your community.	आपके विचर हमरे साथ बातने के लिये धनियवाद. अब हम आपके समाज मे, बच्चो के पोषन के लिये क्या सुविधा उपलब्ध है, इस् बारे मे बात करेगे.
4.	What services related to nutrition are provided to families with young children in your community? Probe: Who leads these activities? Probe: What is your involvement in these activities?	आपके समाज मे जिन परिवार मे छोते बच्चे है, उन परिवारो के लिये पोषन के संबंधित क्या सुविधये उपलब्ध है? Probe: इन गतिविधियों को कौन lead करता है? Probe: इन गतिविधियों मे आपकि भागीदारी क्या है/ किस तरहा कि है?
	Note: If ANM states that she works on nutrition, proceed to the next question. If not, proceed to the questions under Trainings/Job Aids Section.	
5.	Can you go into more detail about how you work on child nutrition? Probe: Counseling? (For mothers) a. Who do you counsel? Why? How frequently? Where? (ask ANM, to walk through a typical meeting) b. What information do you counsel on? i. Maternal nutrition- diet, IFA	क्या आप मुजे आपका जो ब्च्चो के पोषन से संबंधित जो काम है, उसके बारे मे और जानकारि दे सकते है? Probe: परमर्श? (जब आप जानकारी देते हो) a. आप किन लोगो को उपबोधित कारते हो? क्यो करते है? कितने बार ? किधर? (आपकि

	ii. Child nutrition – exclusive breastfeeding, CF Probe: Height/weight measurements? (Mainly the AWW help, but we can see if ASHA may help?) Probe: Train others? (For FLW's) a. Who do you train? Why? How frequently? Where? b. What information do you train on? Probe: Supportive supervision for ASHA/AWW for IYCF related home visits and counseling? How/when do they follow up with them? Strategies for helping FLWs when they are having difficulties?	सामान्य बैठक का वर्नन किजिये) b. आप किन जनकरि के बारे मे उपबोधित करते है? i. मातृ पोषण- आहार, IFA ii. बाल पोषन- विशेष रूप से स्तनपान, पुरक आहर Probe: कद/ वजन मापन? (Mainly the AWW help, but we can see if ASHA may help?) Probe: औरो को त्रैनिग देन? **a.** आप किनको train करती हो**?** क्यो**?** कितनी बार**?** किधर**?** b. किन जानकरियो के बारेमे आप train करते हो**?** Probe: आप ASHA और AWW के काम की परवेकशन/ निगरानि कैसे करते है? आपको कैसे पता लगता है, की वे बराबर काम कर रही है? आप कब और कभी उन से उन्हके काम के बारे मे पुच्छते हो?

		जब FLWs को उनके काम मे दीक्कत्त आती है, तब आप किन तरीको का इस्तमाल करते हो?
	TRAINING/JOB AIDS – Let's discuss the trainings and other tools that you may have received related to nutrition.	अब हम आपाको पोषन से संबंधित मिले हुए त्रैनिंग और अन्य चीजो के बारे मे बात करेगे.
6.	Can you describe the type of trainings that you have received related to child feeding? Probe: Government trainings? a. General topics covered? b. Was this useful? Why or why not? Probe: School trainings? a. General topics covered? b. Was this useful? Why or why not? Probe: From CARE facilitator? a. Difficult to understand? b. How do you feel about the way the material was presented? c. Were the trainings valuable? i. Increase in your knowledge? ii. Were they general or specific? d. How could they be improved?	आपको बच्चो के खाने-पीने के बारे मे जो त्रैनिंग दि गयि है, उसके बारे मे क्या आप वर्णन कर सकते है**?** Probe: Government trainings? a. सामान्य विषय जो कवर किये गये**?** b. क्या यह त्रैनिंग फयदेमंद रहि**?** क्यो/क्यो नहि**?** Probe: School trainings? a. सामान्य विषय जो कवर किये गये**?** b. क्या यह त्रैनिंग फयदेमंद रहि**?** क्यो/क्यो नहि**?** Probe: From CARE facilitator? a. समजनेमे कोइ दिकत्त? b. Training material जिस तरहा से पेश किया गया था, उसपर आपका क्या विचार है? c. क्या यह Training महत्व्पुर्न थि? i. क्या आपकी जानकारी मे फरक पडा? क्या?

		ii. यहा Training general थि या विशिष्ट थि? d. यह Training में सुधार लाना हो तो किस तरह से ला सकते है?
7.	Can you describe the type of trainings that you have led related to child feeding? Probe: HSC meetings? a. Did you feel prepared to lead these trainings? Why/why not? i. What would have helped you feel more prepared? b. What were the main challenges? i. How did you overcome these challenges? If challenges were not overcome, what do you think could have been possible solutions? ii. What specific topics related to nutrition are difficult to understand? To teach? c. What would help you improve these trainings? d. What was good about these trainings? e. How did AWW/ASHA perceive trainings? f. How do you feel being responsible for these trainings? i. Should someone else be responsible?	आपने दुसरो को किस type की training दी है, बच्चो के आहार को लेकर? Probe: HSC meetings? a. क्या आप यहा meeting लेने को ready थे? क्यो/ क्यो नहि? i. एसा क्या है जो आपको ये meeting के लिया अच्छि तरह ready करत? b. आपकी चुनौतिया क्या थी? i. आपने उन चुनौतियो का कैसे समना किया? अगर आप उन चुनौतियो का समना नहि कर पये, तो आपके हिसाबसे उन समसिया को कैसे सुलझा सकते है? ii. पोषन से संबंदीत ऐसा कौंसा विशय है जो समजने मे आपको दिकत्त होति है? सीखाने मे? c. ऐसा क्या है जिससे आप इन trainings मे सुधर ला सकते हो?

		d. यह trainings की अच्छि बात क्या है? e. AWW/ASHA इन trainings को कैसे समझते है? f. आपके उपर इन trainings कि जिम्मेदारिया है, इससे आपको कैसा मेहसुस होता है? i. आपके हिसाबसे इन trainings कि झिंमेदारी किसि और को देना चाहिये?
8.	Have you seen this tool before?	क्या आपने यहा उपकर पहेले कभी देखा है?
	Note: Show the ANM one tool at a time (i.e. mobile kunji, katori, home visit planner). If she says that she has seen it before, proceed to the probes. If not, move on to the next tool.	
	Probe: What is the use of this tool" Probe: When and with whom do you use this tool? Probe: What is your personal opinion of this tool? Helpful? Probe: What do FLWs think about this tool? (ProbeASHA/AWW) Probe: What do families think about this tool? Probe: Challenges using this tool? If so, how do you overcome these or how do you think these challenges can be overcome? Probe: What is good about this tool?	Probe: इस चीज का कैसे इस्तमाल करते है? Probe: आप इस उपकरन का इस्तमाल कभी और किस पर इस्तमाल करेंगे? Probe: आपके हिसाब से यहा चीझ कैसा है? (सहयक?)- Redundant question Probe: आपके हिसाब्से इस चीझ के बारे मे FLWs की क्या सोच है? Probe: आपके हिसाब्से इस चीझ के बारे मे इस समाज के परिवारो की क्या सोच है? Probe: इस चीझ को इस्तमाल करने मे आपको कीन दिकत्तो/ चुनौतियो का समना करना पड्ता है?

		अगर हा, आप इस कहुनौति का समना कैसे करते है. आप इस पर कीस तरह जीत प्राप्त कर सकते है? Probe: इस चीझ मे क्या अच्छाइ है?
9.	What other trainings and tools do you think would help you improve child nutrition in this community?	आप के अनुसार इस समाज मे बच्चो के पोषन मे सुधार लाने के लिये और कौंसी चीझ या training का इस्तमाल किया जा सकता है?
	IYCF CONTENT – Let's talk more about feeding practices for children less than 2 years of age.	
10.	What advice do you give to mothers and their families regarding feeding practices of children less than 2 years of age? (Upri Aahar/ Purak aahar)? Probe: Initiation of semi-solid foods? Probe: Quantity? Probe: Frequency? Probe: Consistency? Probe: Hand hygiene/sanitation? Probe: Food diversity? Probe: Whom do you give this advice to?	2 साल और उससे कम उमर के बच्चो के माताओं और उनके परिवारों को आप खाने-पीने के तरीको के बारेमे क्या सलाह देते हो? Probe: अर्द्ध ठोस आहार की शुरूआत? Probe: मात्रा? Probe: कितने बार? Probe: घाडापन? Probe: खाने से पहले हाथ की सफाई? Probe: खाने मे विविधता? Probe: आप यह सलाह किन्हे देती है?
	When it comes to child feeding, you may have heard the following messages are usually recommended for mothers (For each message, stop and ask if these messages were covered in the HSC meetings in detail or were they just mentioned? Which is the most	जब हम बच्चो के खाने की बात करते है, आपने ये सिफारिश सुनि होगि. (For each message, stop and ask if these messages were covered in the HSC meetings in detail or were they just mentioned? Which is

	difficult for the FLW's to council on? And which ones are difficult for the HH to follow?): • Begin to introduce cereal-based semi-solid foods after 6 months • Feed age-appropriate quantity to the child (2 small katori, 2-3 time/day - 6 to 8 months, 3 katori , 3-4 times/day, – 9 to 12 months, 3 katori, full day– 12 to 24 months+ snacks) • Feed age-appropriate frequency to the child (2-3 times in a day, and for 9-24 month children include snacks between meals as well) • Feed thick semi-solid food • Wash your hands/child's hands before preparing food and serving food to the child • Feed a variety of foods to the child using different ingredients available at home – cereals, vegetables, meat, dairy, fats/oils fruits, legumes etc. • Engage in responsive feeding by being sensitive to hunger cues, feeding slowly and patiently, encouraging the child to eat, minimizing distractions, and making eye contact.	the most difficult for the FLW's to council on? And which ones are difficult for the HH to follow?): • 6 महिने से बच्चो को अनाज अर्द्ध ठोस आहार के रूप मे देना चाहिये • खाने की मात्रा बच्चे की उमर के हीसाब से देना चाहीये (2 small katori, 2-3 time/day - 6 to 8 months, 3 katori , 3-4 times/day, – 9 to 12 months, 3 katori, full day– 12 to 24 months+ snacks) • ब्च्चो को आहार दिनभर मे उनके उमर के हीसाब से देना चाहीये (2-3 times in a day, and for 9-24 month children include snacks between meals as well) • खाना घाढा अर्द्ध ठोस दे • खाना बनाने और खिलाने से पहले अपना और अपने बच्चे का हाथ धोना • बच्चे को वीभिन प्रकार का खाना खिलाईये, जैसे अनाज, सब्जि, मास, दुध, फल, घी, दाल, एत्यादि **बच्चे को खाना खीलाने का तरीका:** • भूख को समझना है. बच्चे को आरमसे और धीरजसे खिलति है. बच्चा अगर नहि खात, तो उसे खाने के लिया प्रोत्सहित करति है, बच्चेकी व्याकुलता को कम करति है, और बच्चे के साथ

		आखो मे आखे मीलाकर बात करति है
11.	Which of the above do you feel is the most important thing for the community to follow in terms of child feeding? Probe: Why? Probe: Do you think that mothers are able to follow this? If no, why not? *[At some point may be helpful to probe which topics FLWs have greatest difficulty with. (i.e. which topic do FLWs get more confused on or have trouble counseling on?)]*	उपर लिखि हुइ चिझो मे से, आप के अनूसार कौन से चीझ आपके समाज मे सबसे महत्वपुर्न है? Probe: क्यो? Probe: क्या आपको लगता है, आपके समाज की माताए इसका पालन करती है? *[At some point may be helpful to probe which topics FLWs have greatest difficulty with. (i.e. which topic do FLWs get more confused on or have trouble counseling on?)]*
12.	Which of the above recommendations do you think are most challenging for households to adopt? Probe: What do you think can be done to overcome these?	ऊपर दि हुइ सिफारिशों में से कौनसी सिफारिश आपको लगती है, इस समाज के घरो मे अपनाना , सबसे चुनौतीपूर्ण लगता है? Probe: इनका सामना आप कैसे करेंगे?
13.	Which of the above recommendations do you think are the easiest for households to adopt? Probe: Why?	ऊपरदि हुइ सिफारिशों में से कौनसी सिफारिश आपको लगता है, इस समाज के घरो मे अपनाना, सबसे आसान है? Probe: क्यो?
	NOTE: If not brought up- probe specifically on quantity:	
14.	What would you do if a mother said her child could not eat the quantity that is recommended? Probe: Do you think quantity of food given to a child is important? Why?	अगर एक मॉ आपसे कहती है की उन का बच्चा उसके उमर के हिसबसे जितना खाना चहिये, उतना नहि खात. ऐसी स्थिती मे आप क्या करेंगे?

		Probe: आपके अनुसार बच्चे की खानेकी मात्र महत्वपुर्न है? क्यो?
15.	Do you believe the mothers can feed their child the required quantity of food? Probe: Why/ why not?	आप के हीसाब से यह समाज मे मा अपने बच्चे को उसके उमर के हीसाबसे खाना खिला सकती है ? Probe: क्यो / क्यो नहि?
	CONCLUDING QUESTIONS – I am going to wrap up with a few closing questions.	
16.	How else can we reach out to women in this community? Probe: Home visits vs. Group meetings? Probe: Benefits and drawbacks to both? Probe: VHSND?	और किस तरहसे आप आपके समाज की महिलाओ तक पहुच सकते हो? Probe: उनके घर जाकर vs. समूह की बैठकों रखकर? Probe: ऐसे करने का फयदा और नुकसान? Probe: VHSND (Village Hand Sanitation and Nutrition Day)?
17.	What other ways could mothers be educated about infant and young child feeding? Probe: Informational materials given directly to the household? Probe: How do you think we can increase the perceptions of importance of nutrition in this community? Probe: What messages will be important to convey this to mothers so they can follow the messages described earlier.	और कौंसे तरीके है, जिसके ध्वारा आप आपके समाजकी मॉ को शीशु पोषन और खाने के बारे मे ज्ञान दे सकते हो/ समजा सकते हो? Probe: सूचनात्मक चीझ सीधे घरोतक पहुचाना? Probe: बच्चो के पोषन के महत्तव के बारे मे आपके गव के लोगो को कैसे समजाया जा सकता है? Probe: आपके समाज मे जो मा और परीवार है, उनको ये

		समजने के लिये और इस चीज का वे पालन कर सके, उसके लिये आप के हीसाब से किन मूद्दतो/ संदेश पर जोर देना चाहिये?
18.	How do families perceive the counseling messages delivered from you compared to the FLWs? Probe: Difference? Why?	FLWs के मुकाबले आपकी सलाह परिवारवाले किस तरह समझते है? Probe: कोइ अंतर? क्यु?
19.	Is there anything else you would like to share with us about anything we talked about today?	क्या आप हमें और कुछ बताना या पूछना चाहेंगी, जिस पर अब तक हमने चर्चा नहीं किया हो?
	Thank you so much for your time and contribution to our research project. We have learned a lot from you today. We hope to work together to effectively improve nutrition and health among infants and young children in this community.	आपके कीमती समय और बात-चीत के लिए धन्यवाद. आज हमने आपसे बहुत कुछ सिखा है. आशा है की हम सब साथ मिलकर शीशु पोषनमे सुधार लाने के लिए और तंदरुस्त शीशु की संखीया बडाने के लिए काम करेंगे.

Tool 4: In-Depth Interview Guide for FLWs (AWW and ASHA)

	PURPOSE	
	1. To understand AWW and ASHA understanding of IYCF content and perceived value of training and materials. 2. To assess AWW and ASHA use of tools, such as katori, mobile kunji, and home visit planner and the main challenges encountered when utilizing tools. 3. To understand the strategies and key challenges AWW and ASHA encounter when counseling women.	
	TARGET PARTICIPANTS	
	2 AWW and 2 ASHA in each of four blocks identified	
	INTRODUCTION	
	Hello, my name is _____, and this is my colleague _____. We are both working with Emory University in the United States of America to identify effective ways to address under nutrition children up to 2 years of age. We are hoping to learn more about your experience with infant and young child feeding, including your thoughts about the trainings and materials that have been provided to you, as well as the key strategies you use and challenges you face counseling mothers. From this information, we will be able to work together to better improve the information given to you and to families in this community in order to improve child nutrition and health. Participation in this interview is voluntary, and you may refuse to answer any questions or decide to finish the interview at any time. There are no penalties or consequences of any kind if you decide that you do	मैं पहले आपको धन्यवाद देना चाहती हुं कि आपने हमसे बात-चीत करने के लिए समय दिया. मेरा नाम ----- हैं और ये मेरी सहयोगी ------ हैं. हम दोनों CARE India और अमेरीका के एमोरी विश्वविद्यालय के विधार्थी हैं. हम यहां 2 साल तक के बच्चों में कुपोषण की समस्या पर शोध के लिये जानकारी लेने आए है. हम आपसे बच्चो के खाने-पीने की जानकारी संबंधित कार्यक्रमों में इस्तेमाल किये गये तरीकों और इन कार्यक्रमों को समाज की मा पर इस्तमाल करते समय आने वाली दिक्कत्तो के बारे में जानना चाहेंगे। हम इन सब की आपसे जानकारी प्रप्त करके कुछ शीख सखे. यह जानकारी के ध्वारा, हम सब साथ मिलकर, इस समाज मे शीशु पोषन मे कुछ सुधार ला सके.

	not want to participate. I would like to remind you that any information you share today will remain completely confidential and will only be shared with members of the research team. During the interview, _____ will be taking notes. We would also like to record this interview so that we don't miss anything that you have to say. The recording will be safely stored and nobody outside the research team will have access to the recording. There will be no way to identify you later. Is it okay with you if we record our conversation? Thank you for your consent. Before we begin, I just want to remind you that we are not testing you in any way and there is no such thing as "right" or "wrong" information. We are interested in hearing about your personal experiences, opinions, and views, so please don't feel shy and respond as openly as you wish. We are excited to learn from you and know that your perspectives will be extremely valuable in improving the program to make it more suitable to you and the community's needs. The interview should last approximately one hour. Are there any questions before we begin?	इस बात-चीत के लिए राजी होना पूरी तरह आप पर निर्भर हैं और हम आपके मर्जी से ही आगे बढेंगे. और किसि भि समय आप को कोइ सवल का उत्तर नहि देना हो, तो आप मुझे साफ मना कर सकती है. मैं आपको पहले यह कहना चाहता हूँ कि हमारी बींच कि सभी बात-चीत सिर्फ हमारे बींच रहेंगी. हमारे बात-चीत के दौरान यह (note-taker) नोट करते रहेंगे. क्योंकि आपके द्वारा कही गई बातों को हम छोडना या भूलना नहीं चाहते है. इस लिए हम इस बात-चीत को record भी करना चाहते हैं. हम इस recording को सुरक्शित रखेंगे और हमारे team को छोड कर कोई भी यह बात-चीत नहीं सुनेंगे. और आपका या आपके घरवालो का नाम क्भी भी नहीं लिया जाएग. क्या इस recording के लिए आप सहमत हैं? ईस्से पहले कि हम शुरु करे मैं आपको यह कहना चाहूँगा कि आप खुल के बात करें. यहा हम कुछ सही या गलत देखने नहीं आए हैं. आपके विचार और आपकि जानकारी हमारे लिए बहूत महत्व्पूर्ण हैं. इस बत-चीत के लिए लगभग 1-1.5 घंटा लगेगा. शुरु करने से पहले कोई सवाल ?
	WARM UP: We would like to know more about your work as a FLW.	
2.	Can you describe your overall roles and responsibilities as an AWW/ASHA? Probe: One thing that you really like?	आप एक आंगनवाड़ी कार्यकर्ता / आशा के रूप में अपने समग्र भूमिका और जिम्मेदारियों का वर्णन कर सकते हैं?

	Probe: One thing that you dislike?	Probe: एक बात जो आपको आपके काम के बारे मे पसंद है? Probe: एक बात जो आपको आपके काम के बारे मे नापसंद है?
2.	What interested you to become a FLW? Probe: Is being a FLW what you thought it would be like? Why/why not?	ऐसि कोंनसि बात है जिसकि वजह से आप आशा/ आंगंवदि कर्यकर्ता बने? Probe: जैसे आपने सोचा था क्या आपका काम वैसे है? क्यो/ क्यो नहि?
3.	How is your experience working with others? Probe: Other ASHAs, other AWWs, ANM, Lady Supervisor? Probe: How do you work together? Probe: How do your roles differ than ASHA/ AWW? Probe: What are the challenges? What makes it difficult/easy to work together?	दुसरो के साथ काम करने का आपका क्या अनुभव है? Probe: दुसरे आश, अंगंवादि कार्यकर्त, nurse या Lady Supervisor के साथ काम कर्ने का अनुभव? Probe: आप एक दुसरे के साथ कैसे और किस तरहा काम करते है? Probe: ASHA/ AWW के काम से आपके काम मे कोइ भेद? Probe: एक दुसरे के साथ काम करते समय आपको किस चुनौतियो का सामना करना पड्ता है? Probe: एक साथ काम करने मे आपको किन कठिनाईयो का सामना करना पड्ता है? Probe: एक साथ काम करने मे आसनि?
	NUTRITION SERVICES – Thank you for sharing. Let's talk more about child nutrition services	आपके विचर हमरे साथ बातने के लिये धनियवाद. अब हम

	available in your community.	आपके समाज मे, बच्चो के पोषन के लिये क्या सुविधा उपलब्ध है, इस् बारे मे बात करेगे.
4.	What services related to nutrition are provided to families with young children in your community? Probe: Who leads these activities? Probe: What is your involvement in these activities?	आपके समाज मे जिन परिवार मे छोते बच्चे है, उन परिवारो के लिये पोषन के संबंधित क्या सुविधये उपलब्ध है? Probe: इन गतिविधियों को कौन lead करता है? Probe: इन गतिविधियों मे आपकि भागीदारी क्या है/ किस तरहा कि है?
	Note: If FLW states that she works on nutrition, proceed to the next question. If not, proceed to the questions under Trainings/Job Aids Section.	
5.	Can you go into more detail about how you work on child nutrition? Probe: Counseling? c. Who do you counsel? Why? How frequently? Where? (ask FLW to walk through a typical meeting) d. What information do you counsel on? iii. Maternal nutrition- diet, IFA iv. Child nutrition – exclusive breastfeeding, CF Probe: THR (Take home Ration)? (Mainly for AWW- but ASHA may help?) Probe: Height/weight measurements? (Same as above)	क्या आप मुजे आपका जो ब्च्चो के पोषन से संबंधित जो काम है, उसके बारे मे और जानकारि दे सकते है? Probe: परामर्श? (जब आप जानकारी देते हो..) c. आप किन लोगो को उपबोधित कारते हो? क्यो करते है? कितने बार ? किधर? (आपकि सामान्या बैठक का वर्नन किजिये) d. आप किन जनकरि के बारे मे उपबोधित करते है? i. मातृ पोषण- आहार, IFA ii. बाल पोषन- विशेष रूप से स्तनपान, पुरक आहर Probe: THR कि सुविधा (mainly the AWW help, but we can see if ASHA may help?) Probe: कद/ वजन मापन? (Mainly the AWW help, but we can see if

		ASHA may help?)
	TRAINING/JOB AIDS – Let's discuss the trainings and other tools that you may have received related to nutrition.	अब हम आपाको पोषन से संबंधित मिले हुए त्रैनिंग और अन्य उपकरणनो के बारे मे बात करेगे.
6.	Can you describe the type of trainings that you have received on counseling?	आप जो आपके समाज की मा और परिवरो को जो सलाह-मशोरा देते हो, यह सब की training आप को मीलती है? आप इस के बारे मे हमे बता सकते है?
7.	Can you describe the type of trainings that you have received related to child feeding? Probe: Government trainings? a. General topics covered? b. Was this useful? Why or why not? Probe: HSC meetings? a. Difficult to understand? b. How do you feel about the way the material was presented? c. Were the trainings valuable? i. Increase in your knowledge? ii. Were they general or specific? d. How could they be improved? i. Specific vs. General? ii. Role-playing?	आपको बच्चो के खाने-पीने के बारे मे जो त्रैनिंग दि गयि है, उसके बारे मे क्या आप वर्णन कर सकते है? Probe: Government trainings? c. सामान्य विषय जो कवर किये गये? d. क्या यह त्रैनिंग फयदेमंद रहि? क्यो/क्यो नहि? Probe: HSC meetings? **a.** समजनेमे कोइ दिकत्त? **b.** Training material जिस तरहा से पेश किया गया था, उसपर आपका क्या विचार है? **c.** क्या यह Training महत्व्पुर्न थि? **i.** क्या आपके जानकारी मे फरक पड? क्या? **ii.** यहा Training general थि या विशिष्ट थि? **d.** यह Training में सुधार लाना हो तो किस तरह से ला सकते है? i. General विरूद्ध (vs.) विशिष्ट? (having separate meetings for ASHA and AWW and

		their roles and responsibilities been explained to them properly) **ii.** खेल भूमिका**?**
8.	What impact did the HSC roll out have on the quality of counseling in this block? Probe: Was it effective? Why/why not? Probe: What worked well? Probe: How did you perceive trainings? Probe: Would something else have been better? What?	बच्चो के पोषन पर आपके block मे HSC roll out का परामर्श की गुणवत्ता पर क्या प्रभव पधा? Probe: प्रभवी था? क्यो/ क्यो नही? Probe: क्या अच्छे से चला? Probe: आप इस trainings को किस तरह समझे? Probe: HSC roll के अलावा, एसा और क्या है, जो बच्चे के पोषन पर प्रभव ला सकता है?
	Note: Show the FLW one tool at a time (i.e. mobile kunji, katori, home visit planner). If she says that she has seen it before, proceed to the probes. If not, move on to the next tool.	
9.	Have you seen this tool before? Probe: Can you describe or walk me through how you would use this tool? Probe: When and with whom do you use this tool? Probe: What is your personal opinion of this tool? Helpful? Probe: What do families think about this tool? Probe: Challenges using this tool? If so, how do you overcome these or how do you think these challenges can be overcome? Probe: What is good about this tool?	क्या आपने यहा उपकर पहेले कभी देखा है? Probe: आप इस उपकरन का किस तरह इस्तमाल कर रहे हो/ किस तरहा करेंगे, इसका वर्णन किजिये**?** Probe: आप इस उपकरन का इस्तमाल कभी और किस पर इस्तमाल करेंगे**?** Probe: आपके हिसाब से यहा चीझ कैसा है**?** (सहयक**?**) Probe: आपके हिसाब्से इस चीझ के बारे मे इस समाज के परिवारो की क्या सोच है**?** Probe: इस चीझ को इस्तमाल करने मे आपको कीन दिकत्तो/ चुनौतियो का समना करना पड्ता है**?**

		अगर हा, आप इस कहुनौति का समना कैसे करते है. आप इस पर कीस तरह जीत प्राप्त कर सकते है? Probe: इस चीझ मे क्या अच्छाइ है?
10.	What impact did the HSC roll out have on the use of job aids (Mobile Kunji, Katori, home visit planner) in this block? Probe: For what purpose are the job aids being used? Counseling? • If yes, is it effective in making counseling more effective • if not, why not effective/using it Probe: Who is using these aids?	बच्चो के पोषण पर आपके block मे HSC roll का Mobile Kunji, Katori, home visit planner के इस्तमाल करने मे क्या प्रभव पधा? Probe: Mobile Kunji, Katori, home visit planner किस के लिए इस्तमाल होते है? सलाह देने के लिए? • If yes, क्या यह समाज की महीलाओ को सलाह देने मे काम आ रहा है? • If not, क्यो प्रभावी नहि है? क्यो इस का इस्तमाल नहि हो रहा? Probe: इन चीजो का कौन इस्तमाल करता है?
11.	What impact did the HSC roll out have in motivating you to go for home visits? Probe: Approximately how many home visits were done before the HSC roll out, about IYCF/CF? Probe: Approximately how many home visits are done now i.e. after the HSC roll out, about IYCF/CF? Probe: Has there been an increase in number of home visits about IYCF/CF? • If yes, what motivated you to visit homes?	बच्चो के पोषण पर आपके block मे HSC roll आप को घर की यत्रा करने के लीए किस तरह प्रोत्साहित क्या? Probe: HSC roll out से पहले, IYCF/CF से संबंधीत कीतने घर की यत्रा FLWs ने की? Probe: HSC roll out के बाद, IYCF/CF से संबंधीत कीतने घर की यत्रा FLWs ने की? Probe: कोइ बधाव? • If yes, घरो की यत्रा करने के लिए, क्या प्रेरित

	Probe: Who do you visit? (E.g. age range of children)	किय? Probe: आप किन लभरथियो को मीलने जाति हो?
12.	What other trainings and tools do you think would help you improve child nutrition in this community?	आप के अनुसार इस समाज मे बच्चो के पोषन मे सुधार लाने के लिये और कौंसी चीज या training का इस्तमाल किया जा सकता है?
	IYCF CONTENT – Let's talk more about feeding practices for children less than 2 years of age.	
13.	What advice do you give to mothers and their families regarding feeding practices of children less than 2 years of age? (Upri Aahar/ Purak aahar)? Probe: Initiation of semi-solid foods? Probe: Quantity? Probe: Frequency? Probe: Consistency? Probe: Hand hygiene/sanitation? Probe: Food diversity?	2 साल और उससे कम उमर के बच्चो के माताओं और उनके परिवारों को आप भोजन प्रथाओ के बारेमे क्या सलाह देते हो? Probe: अर्द्ध ठोस आहार की शुरूआत? Probe: मात्रा? Probe: कितने बार? Probe: घाडापन? Probe: खाने से पहले हाथ की सफाई? Probe: खाने मे विविधता?
	When it comes to child feeding, you may have heard the following messages are usually recommended for mothers (For each message, stop and ask if she has heard that before or not, if yes, from where? Who gives this message – ASHA/AWW to the beneficiaries? How do you give this message to the HH? Explain/Role-play? Are the mothers /care-takers able to follow your message?):	जब हम बच्चो के खाने की बात करते है, आपने ये सिफारिश सुनि होगि. (For each message, stop and ask if she has heard that before or not, if yes, from where? Who gives this message – ASHA/AWW to the beneficiaries? How do you give this message to the HH? Explain/Role-play? Are the mothers /care-takers able to follow your message?): • 6 महिने से बच्चो को अनाज अर्द्ध ठोस आहार के रूप मे देना

	• Begin to introduce cereal-based semi-solid foods after 6 months • Feed age-appropriate quantity to the child (2 small katori, 2-3 time/day - 6 to 8 months, 3 katori , 3-4 times/day, – 9 to 12 months, 3 katori, full day– 12 to 24 months+ snacks) • Feed age-appropriate frequency to the child (2-3 times in a day, and for 9-24 month children include snacks between meals as well) • Feed thick semi-solid food • Wash your hands/child's hands before preparing food and serving food to the child • Feed a variety of foods to the child using different ingredients available at home – cereals, vegetables, meat, dairy, fats/oils fruits, legumes etc. • Engage in responsive feeding by being sensitive to hunger cues, feeding slowly and patiently, encouraging the child to eat, minimizing distractions, and making eye contact.	चाहिये • खाने की मात्रा बच्चे की उमर के हीसाब से देना चाहीये (2 small katori, 2-3 time/day - 6 to 8 months, 3 katori , 3-4 times/day, – 9 to 12 months, 3 katori, full day– 12 to 24 months+ snacks) • ब्च्चो को आहार दिनभर मे उनके उमर के हीसाब से देना चाहीये (2-3 times in a day, and for 9-24 month children include snacks between meals as well) • खाना घाढा अर्द्ध ठोस दे • खाना बनाने और खिलाने से पहले अपना और अपने बच्चे का हाथ धोना • बच्चे को वीभिन प्रकार का खाना खिलाईये, जैसे अनाज, सब्जि, मास, दुध, फल, घी, दाल, एत्यादि **बच्चे को खाना खीलाने का तरीक:** • भूख को समझना है. बच्चे को आरमसे और धीरजसे खिलति है. बच्चा अगर नहि खात, तो उसे खाने के लिया प्रोत्सहित करति है, बच्चेकी व्याकुलता को कम करति है, और बच्चे के साथ आखो मे आखे मीलाकर बात करति है
14.	Which of the above do you feel is the most important thing for the community to follow in terms of child feeding? Probe: Why? Probe: Do you think that mothers are able to follow this? If no, why not?	उपर लिखि हुइ चिझो मे से, आप के अनूसार कौन से चीझ आपके समाज मे सबसे महत्वपुर्न है? Probe: क्यो? Probe: आप कीसी के घर पे जाति हो, ये काम आसान है? या कुच लोग इसे नहि मानते है, या उन्हे यह बात

		समजाना मुशकिल है?
15.	Which of the above recommendations do you think are most challenging for households to adopt? Probe: What do you think can be done to overcome these?	ऊपर दि हुइ सिफारिशों में से कौनसी सिफारिश आपको लगती है, इस समाज के घरो मे अपनाना , सबसे चुनौतीपूर्ण लगता है? Probe: इनका सामना आप कैसे करेंगे?
16.	Which of the above recommendations do you think are the easiest for households to adopt? Probe: Why?	ऊपरदि हुइ सिफारिशों में से कौनसी सिफारिश आपको लगता है, इस समाज के घरो मे अपनाना, सबसे आसान है? Probe: क्यो?
	NOTE: If not brought up- probe specifically on quantity:	
17.	What would you do if a mother said her child could not eat the quantity that is recommended? Probe: Do you think quantity of food given to a child is important? Why?	अगर एक मॉ आपसे कहती है की उन का बच्चा उसके उमर के हिसबसे जितना खाना चहिये, उतना नहि खात. ऐसी स्थिती मे आप क्या करेंगे? Probe: आपके अनुसार बच्चे की खानेकी मात्र महत्वपुर्न है? क्यो?
	CONCLUDING QUESTIONS – I am going to wrap up with a few closing questions.	
18.	How else can we reach out to women in this community? Probe: Home visits vs. Group meetings? Probe: Benefits and drawbacks to both? Probe: VHSND?	और किस तरहसे आप आपके समाज की महिलाओ तक पहुच सकते हो? Probe: उनके घर जाकर vs. समूह की बैठकों रखकर? Probe: ऐसे करने का फयदा और नुकसान? Probe: VHSND (Village Hand Sanitation and Nutrition Day
19.	What else would help you counsel mothers? Probe: Decrease burden?	ऐसी कौंसि चीज आप को दी जाए जैसे कटोरी, वगैरे, जिस से लोगो तक आप आसानी से अपनी बात पहूचा सकती हो. और

	Probe: Support? Incentives? Probe: Informational materials given directly to the household?	लोग आसानी से आपकी बात समज सके? Probe: काम आसान करन? Probe: समर्थन या सहारा मिलना? प्रोत्साहन? Probe: सूचनात्मक चीझ सीधे घरोतक पहुचान?
20.	What other ways could mothers be educated about infant and young child feeding? Probe: What about other family members?	और कौंसे तरीके है, जिसके ध्वारा आप आपके समाजकी मॉ को शीशु पोषन और खाने के बारे मे ज्ञान दे सकते हो? Probe: बाकी के परीवारवालो का क्या?
21.	How do families perceive the counseling messages delivered from you compared to the ANMs? Probe: Difference? Why? Probe: Any difference in ASHA/AWW?	ANM के मुकाबले आपकी सलाह परिवारवाले किस तरह समझते है? Probe: कोइ अंतर? क्यु? Probe: ASHA/AWW मे कोइ अंतर?
22..	Is there anything else you would like to share with us about anything we talked about today?	क्या आप हमें और कुछ बताना या पूछना चाहेंगी, जिस पर अब तक हमने चर्चा नहीं किया हो?
	Thank you so much for your time and contribution to our research project. We have learned a lot from you today. We hope to work together to effectively improve nutrition and health among infants and young children in this community.	आपके कीमती समय और बात-चीत के लिए धन्यवाद. आज हमने आपसे बहुत कुछ सिखा है. आशा है की हम सब साथ मिलकर शीशु पोषनमे सुधार लाने के लिए और तंदरुस्त शीशु की संखीया बडाने के लिए काम करेंगे.

Tool 5: In-Depth Interview Guide for Households (HH)

	PURPOSE	
	1. To understand HH child feeding practices and understanding of IYCF content. 2. To assess the main sources of child feeding information for HH. 3. To understand the key strategies and challenges HH encounter regarding child nutrition.	
	TARGET PARTICIPANTS	
	3 HH with children 6-24 months in each of four blocks identified	
	INTRODUCTION	
	Hello, my name is _____, and this is my colleague _____. We are both working with CARE India and Emory University in the United States of America to identify effective ways to address under nutrition among pregnant women, breastfeeding mothers, and children up to 2 years of age. We are hoping to learn more about your personal experience with infant and young child feeding, including the key strategies you use and challenges you face. From this information, we will be able to work together to better improve the information given to you and other households in this community in order to improve child nutrition and health. Participation in this interview is voluntary, and you may refuse to answer any questions or decide to finish the interview at any time. There are no penalties or consequences of any kind if you decide that you do	मैं पहले आपको धन्यवाद देना चाहती हुं कि आपने हमसे बात-चीत करने के लिए समय दिया. मेरा नाम ----- हैं और ये मेरी सहयोगी ------ हैं. हम दोनों CARE India और अमेरीका के एमोरी विश्वविद्यालय के विधार्थी हैं. हम यहां 2 साल तक के बच्चों में कुपोषण की समस्या पर शोध के लिये जानकारी लेने आए है. दिदि, आपको तो काफी अनूभव होग, छोटे बच्चे के खाने-पीने के बारे मे. हम आपसे आपका अनुभव जानने आए है. आप किन तरीको का इस्तमाल करती हो और आप को किन दीक्कत्तो का सामना करना पद्ता है, इस बारे मे हम आपसे बात करना चाहते है. इस जानकारी द्वारा, हम सब मिल कर

	not want to participate. I would like to remind you that any information you share today will remain completely confidential and will only be shared with members of the research team. During the interview, _____ will be taking notes. We would also like to record this interview so that we don't miss anything that you have to say. The recording will be safely stored and nobody outside the research team will have access to the recording. There will be no way to identify you later. Is it okay with you if we record our conversation? Thank you for your consent. Before we begin, I just want to remind you that we are not testing you in any way and there is no such thing as "right" or "wrong" information. We are interested in hearing about your personal experiences, opinions, and views, so please don't feel shy and respond as openly as you wish. We are excited to learn from you and know that your perspectives will be extremely valuable in improving the program to make it more suitable to you and the community's needs. The interview should last approximately one hour. Are there any questions before we begin?	शीशु पोषण और उसके सेहत मे सुधर लाने का प्रयास कर सकते है. इस बात-चीत के लिए राजी होना पूरी तरह आप पर निर्भर हैं और हम आपके मर्जी से ही आगे बढेंगे. और किसि भि समय आप को कोइ सवल का उत्तर नहि देना हो, तो आप मुझे साफ मना कर सकती है. मैं आपको पहले यह कहना चाहता हूँ कि हमारी बींच कि सभी बात-चीत सिर्फ हमारे बींच रहेंगी. हमारे बात-चीत के दौरान यह (note-taker) नोट करते रहेंगे. क्योंकि आपके द्वारा कही गई बातों को हम छोडना या भूलना नहीं चाहते है. इस लिए हम इस बात-चीत को record भी करना चाहते हैं. हम इस recording को सुरक्शित रखेंगे और हमारे team को छोड कर कोई भी यह बात-चीत नहीं सुनेंगे. और आपका या आपके घरवालो का नाम क्भी भी नहीं लिया जाएग. क्या इस recording के लिए आप सहमत हैं? ईस्से पहले कि हम शुरु करे मैं आपको यह कहना चाहूँगा कि आप खुल के बात करें. यहा हम कुछ सही या गलत देखने नहीं आए हैं. आपके विचार और आपकि जानकारी हमारे लिए बहूत

		महत्व्पूर्ण हैं. इस बत-चीत के लिए लगभग 1-1.5 घंटा लगेगा. शुरु करने से पहले कोई सवाल ?
	WARM UP: We would like to know more about your family.	
3.	Can you please tell us how many children you have and their ages?	आपके घर मे कितने बच्चे है, और उनकी उम्र?
2.	Who else lives in the household?	आपके घर मे और कौन रहता है?
3.	When it comes to your child's health, what according to you is the most important to focus on? (What do you think is the most important thing for you for your child to be healthy?) Probe: Immunizations? What he/she eats? Cleanliness? Education? Probe: Why?	जब आपके बच्चे की सेहत की बात होती है, तब आपको सबसे ज्यादा क्या जरूरी लगता है? Probe: प्रतिरक्षण? बच्चा क्या खाता है? साफ-सफाई? शिक्षा? Probe: क्यो?
	NUTRITION OF CHILD - Thank you for sharing. Let's talk about what your child eats.	यह जानकरी के लिया धन्यवाद. अब हम आपके बच्चे के खाने के बारे मे बात करेंगे.
4.	Are you the person in the household who usually feeds the child or decides how to feed the child? Probe: If not – request for the other caregiver to join discussion.	आपके घर मे, क्या आप बच्चे के खाने-पीने का निर्नय लेति है? जैसे बच्चे को कौन खिलाता है, कैसे खिलाता है? Probe: If not – request for the other caregiver to join discussion.
5.	Are you currently breastfeeding your baby? Probe: (**IF Yes**) How many times do you breastfeed during the day? The night? Probe: (**IF NO**) Why are you not breastfeeding?	क्या आप अभी स्तनपान (आपका धुध पीला) कर राहि हो? Probe: (**IF Yes**) दिन मे कितनि बार? और रात मे

	a. At what age did you stop breastfeeding? b. Why did you stop at that age?	करति हो? Probe: (**IF NO**) आप स्तनपान क्यो नहि करति? a. स्तनपान बंद करते समय, बच्चे कि क्या उमर थि? b. आपने उस उमर मे स्तनपान क्यो बंद किय?
6.	Have you given any food to your baby other than breast milk? **IF YES:** Probe: What was the first thing you gave your baby to eat? Probe: Why did you decide to start with this particular food? Probe: How old was your baby when you gave her/him this particular food for the first time? Probe: What kind of foods are you feeding your baby now? Most commonly fed foods? **IF NO:** Probe: Why haven't you started feeding? Probe: When do you plan to start feeding? Why then?	स्तनपान के अलावा आपने आपके बच्चे को और कोइ प्रकार का खाना दिया है? **IF YES:** Probe: आपने सबसे पहले बच्चे को क्या खिलाय? Probe: यह चीज से क्यो खिलाना शुरु किय? Probe: आपका बच्चा तब कितनि उम्र का होग? Probe: अब आप अपने बच्चे को क्या खाना खिलाति है? नाम बताईये? **IF NO:** Probe: आपने उपरी आहार की शुरुवात क्यो नहि कि? Probe: आप बच्चेको उपरी आहार देना कब शुरु करने का सोच रहि है? तब क्यो?
	NOTE: Continue with questions below only if mother is currently feeding child:	

7.	How many times a day do you feed your child? (Ask about main meals and snacks)? Probe: Did anyone tell you to do that? Who?	दिन मे कितने समय आप आपके बच्चे को खाना खिलाति है? (Ask about main meals and snacks)? Probe: किसिने आपको यह करने के लिए कह? कीसने?
8.	**If the frequency is less than 2-3 times a day for children 6-8 months or less than 3 times a day with snacks in between meals for children 9-23 months**: Probe: If ASHA/AWW asked you to increase the number of times you feed your child each day, would you do this? Why/why not? Probe: **IF NO –** What difficulties would you have? What would help you to increase the number of times you feed?	**If the frequency is less than 2-3 times a day for children 6-8 months or less than 3 times a day with snacks in between meals for children 9-23 months**: Probe: अगर ASHA/AWW आपको कहति है कि बच्चे को दिन मे जितना खिलाते हो उससे ज्यादा खिलना चहिये, आप उनकि बात सुनेगि? क्यो/ क्यो नहि? Probe: **IF NO –** आपको किन मुश्किलो का सामना करना पदेगा? ऐसा क्या है जो आपको मदद कर सकता है?
9.	When you feed your child a meal, how much food is given to the child at each meal (show katori and ask to estimate)? Probe: How much does the child eat out of this? Probe: If it were necessary to increase the amount of food that you give your child at each meal, would you be able to do this? Probe: What difficulties would you have? What would help you to give the recommended amount of food?	आप आपके बच्चे को खाना खिलाते समय, हर बार कितना खाना देती है (show katori and ask to estimate)? Probe: इस मे से आपका बच्चा कितना खाता है? Probe: आपके बच्चे के खाने की मात्र अगर बधानी हो, तो क्या आप यह कर साकेंगी? Probe: आपको यह चीज अमल करने के लिये किन कठिनाइयो का सामना करना होगा? एसा क्या है जो आपको

		बच्चे को उसके उम्र के हिसाबसे खाना देने मे मदद करेंगा?
10.	Do you prefer to feed your child more liquid or more solid (thicker) foods?	आप आपके बच्चे को किस तरह का खाना देना पसंद करति है**?** (घाधापन) Probe: ज्यादा पतल, या ज्यादा घाधा (ठोस)? नरम?
	If prefers more liquid: Probe: When should thicker, more solid foods be given to a child? Probe: If it were necessary to give your baby more solid (thicker) foods, would you be willing to do this? Probe: What difficulties would you have? What would help you be able to give them thicker food?	**If prefers more liquid**: Probe: बच्चे को ज्यादा घाधा, ठोस चीजे कब खाने को दी जाना चाहीए? Probe: अगर आपके बच्चे को ज्यादा घाधा खाना खिलाने को कहा गया हो, तो क्या आप बच्चेको घाधा खाना खिलाएगी? Probe: आपको यह चीज अमल करने के लिये किन दीक्क्त्तो का सामना करना होगा? एसा क्या है जो आपको बच्चे को घाधा खाना देने मे मदद करेंगा?
11.	Do you feed your child eggs, meat, fish, and poultry? Probe: If no, why not?	क्या आप आपके बच्चे को अंडा**,** मास**,** माच्छी**,** chicken खिलाती है? Probe: If no, क्यो नहि?
12.	Do you feed your child fruits and vegetables? Probe: If yes, what all fruits and vegetables do you feed? Probe: If no, why not?	क्या आप आपके बच्चे को फल और सब्जि खिलाती है? Probe: If yes, कौंसे फल और सब्जि खीलाति है? Probe: If no, क्यो नहि?

13.	When you are feeding your child and he/she stops eating, what do you do? Probe: How would you motivate her/him to eat? Probe: What could you do so that the child has someone to help her/him at every meal? Probe: What difficulties would you have in doing this?	आपके बच्चे को खाना खिलाते समय, बच्चा अगर खाना बंद कर देता है, तब आप क्या करती हो? Probe: आप बच्चे को खाने के लिये कैसे प्रेरित करती हो? Probe: आप ऐसे क्या कर सकती है, जीससे बच्चेको खाना खीलाने के लिये कोइ हो? Probe: यह करने के लिया आपको किन कठिनाइयों का सामना करना पधेगा?
	IYCF CONTENT	
	Let's talk more about feeding practices for children less than 2 years of age.	अब हम, 2 साल से कम उम्र के बच्चो को कैसे खाना खिलाते है या खिलाना चाहीए, उस बारे मे बात करेंगे.
14.	When it comes to child feeding, you may have heard the following advice **(For each message, stop and ask if they have ever heard that from anywhere. If so, ask from whom they have heard this advice. If not, move on to the next advice** **How do the FLW's give this message? Explain/Role-play?** **Are you able to follow this message? Why/ why not?):**	जब हम बच्चो के खाने की बात करते है, आपने ये सलाह सुनि होगि. **(For each message, stop and ask if they have ever heard that from anywhere. If so, ask from whom they have heard this advice. If not, move on to the next advice** **How do the FLW's give this message? Explain/Role-play?** **Are you able to follow this message? Why/ why not?):**

	• Begin to introduce cereal-based semi-solid foods after 6 months • Feed age-appropriate quantity to the child (2 small katori, 2-3 time/day - 6 to 8 months, 3 katori , 3-4 times/day, – 9 to 12 months, 3 katori, full day– 12 to 24 months+ snacks) • Feed age-appropriate frequency to the child (2-3 times in a day, and for 9-24 month children include snacks between meals as well) • Feed thick semi-solid food • Wash your hands/child's hands before preparing food and serving food to the child • Feed a variety of foods to the child using different ingredients available at home – cereals, vegetables, meat, dairy, fats/oils fruits, legumes etc. • Engage in responsive feeding by being sensitive to hunger cues, feeding slowly and patiently, encouraging the child to eat, minimizing distractions, and making eye contact.	• 6 महिने से बच्चो को अनाज अर्द्ध ठोस आहार के रूप मे देना चाहिये • खाने की मात्रा बच्चे की उमर के हीसाब से देना चाहीये (2 small katori, 2-3 time/day - 6 to 8 months, 3 katori , 3-4 times/day, – 9 to 12 months, 3 katori, full day– 12 to 24 months+ snacks) • ब्च्चो को आहार दिनभर मे उनके उमर के हीसाब से देना चाहीये (2-3 times in a day, and for 9-24 month children include snacks between meals as well) • खाना घाढा अर्द्ध ठोस दे • खाना बनाने और खिलाने से पहले अपना और अपने बच्चे का हाथ धोना • बच्चे को वीभिन प्रकार का खाना खिलाईये, जैसे अनाज, सब्जि, मास, दुध, फल, घी, दाल, एत्यादि **बच्चे को खाना खीलाने का तरीक:** • भूख को समझना है. बच्चे को आरमसे और धीरजसे खिलति है. बच्चा अगर नहि खात, तो उसे खाने के लिया प्रोत्सहित करति है, बच्चेकी व्याकुलता को कम करति है, और बच्चे के साथ आखो मे आखे मीलाकर बात करति है
15.	Which of the advice do you feel is the most important	इन चिजो मे से, आप के अनूसार कौन सी चीज आपको सबसे

	thing for you to follow in terms of child feeding? Probe: Why? Probe: Are you able to follow this? If no, why not?	महत्वपुर्न लगति है? Probe: क्यो? Probe: क्या आपको लगता है, आप इसका पालन करती है? If no, why not?
16.	Who do you meet with, ASHA/AWW? Where, when, how frequently, are the meetings helpful?	आप किन से मीलते हो, ASHA/AWW? किधर, कब, कितनि बार? Meetings का फयाद?
	Note: Show the respondent the mobile kunji and katori. If she says that she has seen it before, proceed to the probes. If not, move on to the next question.	**Note: Show the respondent the mobile kunji and katori. If she says that she has seen it before, proceed to the probes. If not, move on to the next question.**
17.	Have you seen this before? Probe: When and with whom did you learn about this tool? Probe: What is your personal opinion of this tool? Helpful?	क्या आपने यह चीज पहले कभि देखी है? Probe: कब और किसके साथ आप इस चीज के बारे में सीखा? Probe: आपके हिसाबसे यह कुंजि कैसि है? सहायक?
	CONCLUDING QUESTIONS – I am going to wrap up with a few closing questions.	
18.	Are there any programs for child feeding and nutrition in your community? Probe: Which ones are you aware of? Probe: Are they helpful?	शीशू पोषन और बच्चे को खाना खीलाने के बारे मे जानकारी हासील करने के बारे मे आपके शेत्र मे कौन से कर्यक्रम होते है? Probe: आपको किन कर्यक्रमो के बारे मे जानकारी है?

		Probe: महत्वपुर्न है?
19.	If you want to learn more about the simple ways to feed your child so that it can bring the most benefits, how would you want to learn about it? Probe: What is good about home visits? What is challenging about home visits? Probe: What is good about group meetings? What is challenging about group meetings? Probe: What is good about learning about child feeding during a day such as Routine Immunization Day? What is challenging about this? Probe: What is good about having informational materials sent directly to your household? What is challenging about this?	अगर आपको, बच्चो को किस तरह खाना खीलाना चहीए, इस विषय पर आसान रूपसे जानकारी हासिल करनी हो, जिससे आपके बच्चे को ज्यादा फायदा हो, इसे आप कैसे सीखना चाहेंगी? Probe: कोइ आपके घर आकर आपको यह सब सीखाए, इसमे क्या अच्छा है? क्या चूनौती है? Probe: समूह की बैठकों (meetings) रखने मे क्या अच्छा है? क्या चूनौती है? Probe: Routine Immunization दिन (टीका करन) पर अगर आपको यह जानकारी मिलती है, इसमे क्या अच्छा है? क्या चूनौती है? Probe: सूचनात्मक चीज आपके घरो तक अगर पहूचाई जाए, इसमे क्या अच्छा है? क्या चूनौती है?
20.	Is there anything else you would like to share with us about anything we talked about today?	क्या आप हमें और कुछ बताना या पूछना चाहेंगी, जिस पर अब तक हमने चर्चा नहीं किया हो?
	Thank you so much for your time and contribution to our research project. We hope to work together to effectively improve nutrition and health among infants and young children in this community.	आपके कीमती समय और बात-चीत के लिए धन्यवाद. आशा है की हम सब साथ मिलकर शीशु पोषनमे सुधार लाने के लिए और तंदरुस्त शीशु की संखीया बडाने के लिए काम करेंगे