Evaluation of Baby Friendly Community Health Initiative in the Integrated District (Lalitpur) of Uttar Pradesh

Final Report

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ABBREVIATIONS

ANM	*Auxiliary Nurse Midwife*
ASHA	*Accredited Social Health Activist*
AWC	*Anganwadi Centre*
AWW	*Anganwadi Worker*
AWS	*Anganwadi Sahaiyka*
BCC	*Behaviour Change Communication*
BFCHI	*Baby Friendly Community Health Initiative*
BPNI	*Breastfeeding Promotion Network of India*
CDO	*Chief Development Officer*
CDPO	*Child Development Project Officer*
CHAI	*Catholic Health Association of India*
CHC	*Community Health Centre*
DLHS	*District Level Household Survey*
DM	*District Magistrate*
DPO	*District Programme Officer*
FGD	*Focus Group Discussions*
HIV	*Human Immunodeficiency Virus*
IBFAN	*International Baby Food Action Network*
ICDS	*Integrated Child Development Services*
IYCF	*Infant and Young Child Feeding*
KMC	*Kangaroo Mother Care*
LHV	*Lady Health Visitor*
MSG	*Mother Support Group*
NFHS	*National Family Health Survey*
NGO	*Non Governmental Organization*
NRHM	*National Rural Health Mission*
PHC	*Primary Health Centre*
PRI	*Panchayati Raj Institute*
SC	*Sub-Centre*
SD	*Standard Deviation Unit*
SRS	*Sample Registration System*
TBA	*Traditional Birth Attendant*
UNICEF	*United Nations International Children's Emergency Fund*
UP	*Uttar Pradesh*
WHO	*World Health Organization*

Executive Summary

Background:

Global evidence shows that skilled support at birth can help initiate breastfeeding optimally. However, to ensure that mothers continue to practice recommended behaviors they need support, encouragement and counseling in their homes and by communities.

In the year 2005, Government of UP and UNICEF, identified Lalitpur as a model district for integrated planning among 16 other districts identified from 15 states in India. Lalitpur was selected for its poor social development indicators. Therefore, as a part of intervention under Integrated District Approach (IDA) BFCHI project was developed to demonstrate a community based strategy, which builds on the ICDS and health delivery system, for improving survival, growth and development out comes for children. It was envisaged that the project will demonstrate a district level strategy toimprove optimal infant and young child feeding practices for further scale up in the state through the ICDS and Health.

The Project leveraged and augmented the capacities of local human resources from the Integrated Child Development Services (Aanganwadi worker) and Health department (ASHA) and mobilized socially committed women within the community to generate demand for nutrition services and reach all households with pregnant women, breastfeeding mothers and children under two's with IYCF messages. Concurrently, efforts were also made to address supply-side barriers to ensure that essential health and nutrition services reach the communities by strengthening the service delivery system.

The expected outcomes of the BFCHI project were as follows-:

- Mother Support Group comprising of the AWW, ASHA and a local woman formed in all the intervention villages including socially excluded communities to promote infant and young child feeding practices.
- Capacity created in the Mother Support Group to provide good quality counselling and support to families for optimal infant and young child feeding practices.
- District hospital and all CHC/PHC functioning as referral points for infant and young child feeding (IYCF) related problems and become baby friendly with: 80% staff nurses having required skills and counseling women delivering at the health institution on early and exclusive breast feeding
- Optimal IYCF practices adopted for at least 90% of infants in the intervention villages at the end of the project period.
- Improved capacity of AWW's in delivering ICDS services with.

The present evaluation is the end-line evaluation, which was undertaken by IKONET at the end of six year implementation phase. The evaluation findings are expected to support in strategic decision making for future implementation/scaling up the strategy in other districts linked to health and ICDS service delivery systems. The learning's will also feed into future partner ships in the area of child nutrition which are focusing on Infant feeding behaviors.

Project Coverage:

The project covered the entire district of Lalitpur, with a total population of about 10 lakh living in 700 villages. Target groups for the intervention were families with pregnant women and or children under-two years of age.

BFCHI Evaluation- Scope:

The end line evaluation was framed around following study questions:

- How far has the BFCHI project reached in terms of planned milestones in the Lalitpur district?
- What factors (training/capacity building, reviews, monitoring and other strategic programming) have contributed in reaching the milestones?
- What has been the project's strategy on addressing socially excluded communities and are there any visible or evidence based results?
- What are the key recommendations to inform further scaling up of the intervention?

Evaluation methodology:

Lalitpur has 651 revenue villages spread across 6 blocks and a relative smaller urban area. A two stage sampling design was adopted for the study.

The first stage was selection of 85 villages out of total 651 villages using the PPS sampling methodology. Majras (hamlets of the main village) and Sahraiyas (villages predominantly inhabited by the tribal population of the same name) were also included in the list of selected villages. Second stage was selection of eligible mothers of children of less than two years from the selected 85 villages. MSGs were selected randomly, if the number of MSG in the village was more than one. A total of 85 MGs comprising of 234 MSG members were covered.

Both qualitative and quantitative tools were used to generate data.

Key Findings of Evaluation:

1. Achievement of BFCHI project in terms of planned milestones

1.1 Knowledge levels of Mother support groups

- MSGs were created in a total of 1286 villages in Lalitpur. Of these 1124 were in villages where an AWC existed and the other 162 were in Sehraiya and Majra villages
- Almost all members of MSG (92.7%) were aware about colostrum and its role in building immunity. The knowledge levels on early initiation and exclusive breastfeeding was universal (>98%) but gaps were observed for other two messages i.e., timely introduction of

complementary feeding practices (77.4) and continued breastfeeding for two years and beyond (68.8).

- The knowledge level of the third woman who was mostly a local woman of the village (an AWW Sahayika or the active women in the village) was better (85%) compared to AWW (57%) and ASHA (42%).

- Most of the MSG members knew about *massaging* (85.9%), a popular technique used in women complaining about problems associated with milk let down. 67% MSG members knew that it was better to feed a child on expressed milk when the breast conditions were not suitable for breastfeeding. The mother support groups however were not very knowledgeable when it came to technical issues like those related to management of sore nipples, mastitis or inverted nipples.

1.2 Infant and Young Child Feeding Practices in the Community

- The breastfeeding practices in the families was found to be good
    - 82% families initiating breastfeeding within one hour of birth
    - 94% families were found practicing exclusive breastfeeding
    - 83% families introduced complementary feeds after six months.
    - 22% families provided food from four or more food groups.
    - Minimum acceptable diet was found to be 10.3% in breastfed children and 14.7% in non breastfed children.

The findings indicate that while MSGs were able to influence early initiation, exclusive breastfeeding and timely introduction, they were not able to adequately address the quality and appropriateness of complementary feeding.

- Early initiation was highest for institutional deliveries (85%), followed by home deliveries (74%) and the private deliveries (56%). The rates of exclusive breast feeding were equally good for both institutional and home delivers (>93% in both the cases) and low in deliveries which took place a private facility (73%).

1.3 Systems for delivering ICDS services with quality

- 70% AWW had maintained survey registers and 90% had the list of target children and mothers. More than 90% AWWs were aware about correct growth plotting and its interpretation. 80% AWW were found to maintain the growth register.

- The in-depth interviews from the district officials and Project team showed that monthly sector meeting of MSGs were very useful in assessing progress of this project and identifying villages where additional efforts were required. These meetings also provided a platform for refreshing MSGs knowledge on IYCF.

- The staff nurse at the health facility emerged as the most important source of counseling with almost 71% respondents confirming her role in counseling. The facilities were also observed to be weighing all children who were delivered at hospital.

2. Factors/Strategies contributing in project achievements

2.1 Training /Capacity building

- The placement of trained 48 middle level trainers/counsellors within the district played an important role determining the quality of mother support groups. The trained pool of middle level counsellors also provided advice on cases which could not be managed at the level of mother support groups.
- The three day training of 3858 members of Mother Support Group empowered the members of MSGs to reach the caregivers of children under twos with good quality counselling and support in time of difficulties (sore nipples, breast engorgement, problems in milk let down, etc).
- The project strengthened the sector meeting platform of s ICDS and enhanced the capacity of supervisors on IYCF as well as other service delivery aspects.
- The strategy of reinforcing IYCF messages through trained staff at health facility was also instrumental in motivating families in adopting correct behaviours.

2.2 Monitoring and Supervision of MSGs

- The project started with 48 IYCF counselors whose main responsibility was to guide the mother support groups in acquiring skills and knowledge to function as effective counselors. Their support enabled MSGs to deliver better on the assigned tasks.

- The BFCHI team worked on creating model AWC where in addition to IYCF some service quality indicators were also included. Continued support was provided for two –three years by the BFCHI team to make the AWCs “model” centers. The responsibility of maintaining AWC as model center was subsequently shifted to ICDS for monitoring and retaining the quality at the centers. Against the total 1124 AWC villages in the project, 764 AWCs were developed as model centers. The IYCF Counselors were assigned to monitor the non-graded AWC i.e. AWCs which were not model. This approach not only ensured sustainability but also helped the BFCHI team to direct its efforts where it was required the most.

- Joint visits were made by the BFCHI staff with DPO/CDPO/Supervisors to centers where gaps were observed in services or behaviors. This approach was also crucial in shifting many centers from C to B category.

2.3 Regular and joint review at sector, block and district level

- Every month a sector meeting was organised jointly by the BFCHI team and ICDS Sector Supervisor to cover 20-25 MSGs. The sector meetings provided an opportunity to discuss the project progress, reinforce key messages and address constraints faced by MSG members in the field. The Sector meetings which were initially started with the purpose of reviewing BFCHI project later helped in institutionalising the ICDS sector meetings and became a forum to discuss the performance of AWW.

In addition district and project level review meetings were also organised.The in-depth interviews from the district officials and Project team shows that the district and project review meetings with ICDS helped in identifying the implementation gaps and suggesting doable solutions for addressing the same.

2.4 Project's strategy on addressing socially excluded communities

- The BFCHI project identified a total of 166 villages where due to the absence a formal service delivery structure from Health or ICDS, the access to health and ICDS services was very poor. These comprised of 99 villages inhabited by the Sehariya tribe, usually located outside the main village with a cluster of households living in extreme poverty. The remaining 66 villages were the Majras or hamlets which were excluded by virtue of not being part of the main village. The BFCHI team observed critical gaps in IYCF practices amongst these communities. Access to these communities was difficult as they were not open to people from outside and frequently travelled outside their identified place of residence in search of livelihood. After several visits and considerable negotiations with the families, BFCHI team was able to motivate some women to take up the task of improving the IYCF practices in their villages. The MSGs in these 162 villages included members from within the community and in only few cases these MSGs also had AWW or ASHAs as their members. This approach increased the access of groups to families and made the task of influencing practices relatively easy.

Recognising that women from Majras and Sehariya tribe found it difficult to comprehend the training content due to lower education levels, the content of the module was simplified and restricted only to IYCF messages, problem solving and negotiating skills with more focus on practical solutions.

Lessons Learnt:

- **Constant reinforcement is required for sustaining practices -** The project approach of reaching mothers through both community and facility based counselling was strategic in bringing breastfeeding counselling closer to families. The frequent home visits and community meetings by MSGs reiterated the need and importance of practicing this behaviour. The reinforcement of breastfeeding messages at the health facility further ensured that the MSG members were not talking in isolation but that this behaviour is recognised and considered important by the doctors and nursing staff also.

- **Quality of counseling by Mother Support Group determines the outcome -** Mother Support Groups if selected and trained properly can provide timely need based quality counseling and practical support to mothers. The three day intensive training was accompanied by monthly meetings at village, sector and block levels for identifying field challenges and knowledge gaps and addressing the same. The strong monitoring system also assured the quality of MSG. Almost eight in ten women interviewed by the evaluation team was visited by the MSG team during all the three phases showing the near universal coverage of target group.

- **Mother support group- social recognition led to greater ownership -** The BFCHI initiative provided the mother support group members a platform for not only learning more about breastfeeding and complementary feeding but also equipped them with practical skills which

contributed to successful breastfeeding in many cases where difficulty was encountered. The positive response from community empowered these members to continue as agents of change in the community. The recognition was instrumental in maintaining the motivation and sustaining these groups over a period of six years. This is evident from the fact that only 5% attrition occurred in the project over 6 year implementation period.

- **Excluded communities can be reached through resources existing within the community -** One of the important innovations in the project was to create MSG in excluded communities of Sehariyas and Majras from within the community. The MSGs in excluded community delivered almost the same results as in the other villages where a formal structure was in place. These findings show that in places where systems are absent or access poor, it is possible to elevate the role and status of volunteers and give them public praise and recognition, duties that earn them respect in the community, and adequate training, skills, and supervision.

- **Breastfeeding is more amenable to change than Complementary feeding -** The evaluation findings show that the project succeeded in changing the breastfeeding practices much more than the complementary feeding. This may be because improving complementary feeding required addressing many complex underlying determinants of feeding behavior like family culture and traditions, poverty, literacy, food insecurity which are not easy to change by a team of three to four people.

- **Retaining members and keeping motivation levels high of MSG is challenging -** In absence of any remuneration the project team sometimes found it challenging to retain the motivation level of the group members especially the third woman. The project findings also show that while the knowledge levels of the third woman from the community was better than AWW or ASHAs, it was the AWW who was more engaged in counseling and visits as compared to the ASHAs and the third woman. The fact that both ASHA and AWW were receiving some kind of honorarium may be a contributory factor for the low participation.

- **System linkages important for project sustainability -** The BFCHI project aimed at strengthening not only the IYCF behavior but also strived to introduce counseling as a service in ICDS and Health system. The strategy involved enhancing capacities of both facility and community staff from Health and ICDS on IYCF and on selected components of service delivery. As a result, there was better upkeep of records and improved organization of community meetings.

  The project recognized the need of regular monitoring linked to routine monitoring done by the system. As the project progressed, the villages designated as “model village” were handed over to ICDS and the villages where more support was required by the team were only left with the project team. The evaluation findings reflect that even though the responsibility was passed to the ICDS and Health, the practices and behavior were continued by the families.

Recommendations:

- **Develop a State Plan of Action on Infant and Young Child Feeding -** The Lalitpur pilot shows that breastfeeding practices can be changed and sustained with support and participation from government systems and resources. However, focused efforts will be required to bring similar changes in state level indicators. A state plan of Action based on learning’s from Lalipur pilot and other successful initiatives needs to be drafted to provide guiding framework for IYCF activities in

the state. The state Plan of action can propose phase wise scaling and promotion of IYCF practices linked to existing opportunities within health and ICDS. As recommended in the new operational guidelines of GOI on IYCF released in 2013, the state too can begin with high case load facilities like district hospitals and first referral units to promote early initiation and gradually move to strengthening exclusive breastfeeding through community opportunities of home visits, weekly take home ration days, community meetings etc.

- **Pilot mother support groups linked to Health and ICDS PIP –** The successful implementation of IYCF project in Lalitpur shows that good facility and community linkages are important for changing breastfeeding practices. The concept of mother support groups can be scaled in select districts using system's platform and lessons learnt can be used for scaling up the strategy across the state as a whole. The second AWW in selected high burden districts of ICDS mission or the already existing "Matrasamiti" created at village level can be explored for identifying the third member in the MSG and for reaching excluded pockets.

- **Leveraging NRHM and ICDS funds -** Good quality training, supervision and monitoring are critical factors for success and funds are required for the same. The budget needs to be built into the annual PIP s of NRHM and ICDS to ensure adequate funds for IYCF activities. The state may consider building in some incentive for the third women which would motivate her to work towards breastfeeding promotion.

- **More research in the area of complementary feeding -** Findings from the present study highlights the improved percentage of breastfeeding practices such as early initiation of breastfeeding within one hour without any pre-lacteals, exclusive breastfeeding for first six months, however the complementary feeding was found to be weak especially with regard to dietary diversity. Improving complementary feeding may require more rigorous research as complementary feeding is an important intervention for addressing stunting, the most prevalent form of under nutrition.

CHAPTER 1: Introduction

Under nutrition in early years has far reaching and damaging consequences, which threatens survival, growth and development of children. Globally, nearly half of under-five child deaths are attributable to under nutrition. This is largely due to the high number of children born with low birth weight; sub-optimal breastfeeding practices and inadequate care and hygiene practices in the first two years of life.

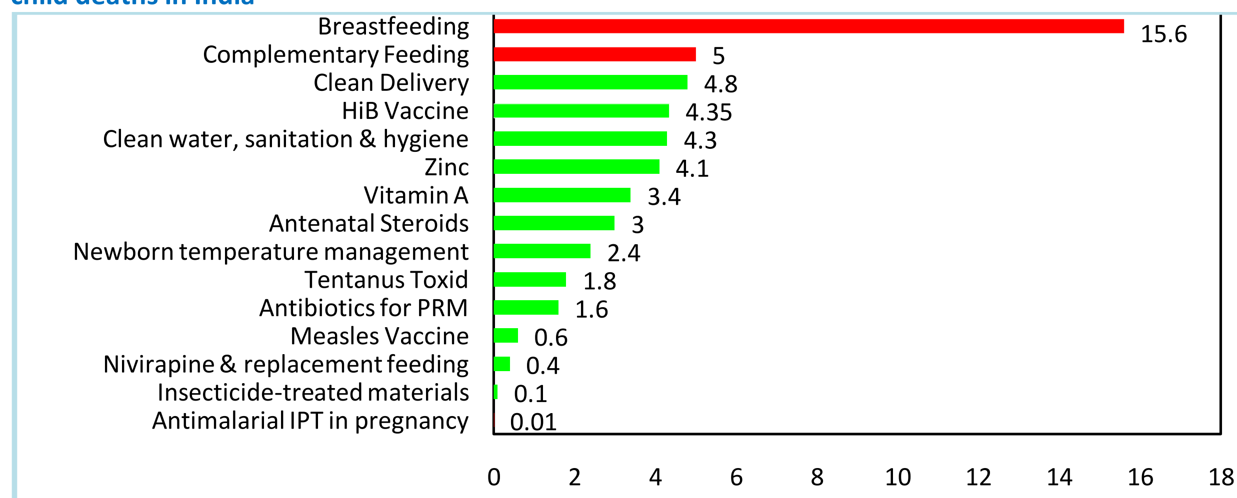
In Uttar Pradesh 15% children under-five years are wasted due to acute under nutrition, 42% are underweight and 57% are stunted due to chronic under nutrition. This percentage continues to rise, with underweight prevalence peaking to 45% by 2 years (NFHS-3), primarily because of inadequate complementary foods and feeding practices, and poor hygiene and sanitation conditions. This clearly underscores that efforts to address malnutrition need to begin early i.e. from pregnancy to first two years of life as this is the critical window of opportunity for the delivery of nutrition interventions, and if proper nutrition interventions are not delivered to children before the age of two years, they could suffer irreversible damage affecting their adult life and that of their subsequent generations.

1.1 Status of infant and young child feeding practices in U.P

Uttar Pradesh, the most populous state with an estimated population of 200 million and home to around one-sixth of the total country's population, alone accounts for over an estimated 5 lakh child deaths annually.

As per 2003 Lancet Child Survival Series, infant and young child feeding ranks among the most effective interventions to improve child nutrition/health and reduce child mortality. Global evidence shows that optimal breastfeeding and complementary feeding practices together can avert almost 20 per cent of under-five deaths. If we apply this to UP, optimal Infant and Young Child Feeding Practices have the potential to prevent at least one lakh child deaths in the state (out of five lakh deaths in U.P).

Figure 1. 1: Optimal breastfeeding and complementary feeding practices can prevent 20 percent of child deaths in India



Source: Lancet Series on Child Survival 2004

However, situation of infant and young child feeding practices in Uttar Pradesh is not very promising as early initiation of breastfeeding within one hour of birth is only 7% against the national average of 24% (NFHS-3). Studies indicate that 19 to 22% neonatal deaths can be averted with universal initiation of breastfeeding within one hour of birth. As regards exclusive breastfeeding, only 51% children between 0-5 months in UP are exclusively breastfed, while scientific evidence indicates that universal exclusive breastfeeding can avert 16% of under five deaths. Similarly, complementary feeding practices in the state need improvement as only 46% children 6-9 months receive solid/semi solid foods along with breast-milk.

1.2 BFCHI Project

Global evidence shows that skilled support at birth can help initiate breastfeeding optimally. However, to ensure that mothers continue to practice recommended behaviors they need support, encouragement and counseling in their homes and by communities. Many developing countries have successfully improved these aforesaid practices by creating community support structures such as lay counselors and or the mother support groups.

Building on these evidences, an intervention project titled "Baby Friendly Community Health Initiative (BFCHI)" was planned and implemented in Lalitpur district, one of the most socially backward districts of Uttar Pradesh by the Department of Paediatrics, Baba Raghav Das Medical College, Gorakhpur in collaboration with Government of U.P. and UNICEF (U.P). Initiated in the year 2006, the project adopted a community-based as well as a facility-based strategy for promotion of optimal IYCF practices through skilled counseling and support. The project which started as a community based initiative evolved considerably over its implementation phases of six years and was eventually integrated in the ICDS Programme thus demonstrating example of sustainability and replicability. .

The project uniquely utilized local human resources within the Integrated Child Development Services (ICDS) and the health programmes and equipped them to bring counseling services and related skill support to families with pregnant women with children below two years. The mobilization group at the village in the form of "mother support group" consisted of AWW, ASHAs and a socially committed woman from the village and at the facility was in the form of trained paramedical staff. The mother support groups promoted, supported and strengthened the breastfeeding and complementary feeding practices at community level and these messages were further reinforced by the trained medical staff when the families visited facility for seeking health services. The project was not limited to awareness generation but also transferred practical skills, support and assistance to mothers for increasing the adoption level of optimal IYCF behaviors and practices by the families.

The expected outcomes from the project were as follows:

- Mother Support Group comprising of the AWW, ASHA and a local woman formed in all the intervention villages including socially excluded communities to promote Infant and Young Child Feeding Practices (IYCF).
- Capacity created in the Mother Support Group to provide good quality counselling and support to families for optimal infant and young child feeding practices.
- District hospital and all CHC/PHC developed as referral points for addressing IYCF related problems and become baby friendly with: 80% health staff having the required skills and counsel women delivering at the health institution on early and exclusive breast feeding.

- Optimal IYCF practices (early initiation, feeding of colostrum, exclusive breastfeeding and introduction of appropriate complementary feeding after six months) adopted for at least 90% of infants in the intervention villages at the end of the project period.

- Improved capacity of AWW's in delivering ICDS services with quality (counselling services for Infant and Young Child Feeding, records updation and maintenance and regularising growth monitoring activities through a well-established review and monitoring systems in place.

The BFCHI project was implemented for a total duration of six years. The baseline was done by an external agency identified by the partner and the end line was done by an agency selected by UNICEF. As the methodology was not exactly comparable only an indicative comparison has been done for selected indicators.

1.3 Objectives of evaluation

- Assess the impact of the project in improving IYCF practices Identify and understand approaches and strategies which have facilitated or hindered planned results. Document process, challenges and lessons learnt in improving the IYCF behaviors at community and health facility level.

The evaluation is expected to support in strategic decision making for future implementation/scaling up the strategy in other districts linked to health and ICDS service delivery systems. The learning will also feed into future partnerships in the area of child nutrition which are focusing on improving Infant feeding behaviors.

1.4 Scope of the Evaluation Activity

On the basis of the objectives of evaluation, the assessment was framed around following study questions:

- How far has the BFCHI project reached in terms of planned milestones (in terms of knowledge, behavior, practice and coverage of optimal infant and young child feeding practices in community and health facilities – among service providers and beneficiaries) in the Lalitpur district?

- What factors (training/capacity building, reviews, monitoring and other strategic programming) have contributed in reaching the milestones?

- What has been the project's strategy on addressing socially excluded communities and are there any visible or evidence based results?

- What are the key recommendations to inform further scaling up of the intervention?

CHAPTER 2: BFCHI – The Project

2.1 Introduction:

In the year 2005, Government of UP and UNICEF, identified Lalitpur as a model district for integrated planning among 16 other districts identified from 15 states in India. Lalitpur was selected for its poor social development indicators. Therefore, as a part of intervention under Integrated District Approach (IDA) BFCHI project was developed to demonstrate a community based strategy, which builds on the ICDS and health delivery system, for improving survival, growth and development outcomes for children. It was envisaged that the project will demonstrate a district level strategy to improve optimal infant and young child feeding practices for further scale up in the state through the ICDS and Health.

The Project leveraged and augmented the capacities of local human resources from the Integrated Child Development Services (ICDS) and Health department and mobilized socially committed women within the community to generate demand for nutrition services and to reach all households with pregnant women, breastfeeding mothers and children under twos with IYCF messages. Concurrently, efforts were also made to address supply-side barriers to ensure that essential health and nutrition services reach the communities. Furthermore, this intervention was not limited to community mobilization through creation of mother support groups, but also strengthened service delivery system through better supportive supervision to Anganwadi Workers and ASHAs and a strong monitoring and regular review mechanism.

2.2 Project Coverage

The project covered the entire district of Lalitpur, with a total population of about 10 lakh primarily living in 700 villages. The Project was scaled up in phased manner, in 2006 it covered Birdha, Talbhet and Jakhora ICDS Projects, and in 2007 it was expanded to cover remaining four ICDS Projects in Madawara, Mehrauni, Bar and Urban ICDS project).

2.3 Target Group

Target groups for the intervention were families of with pregnant women and children under-two years of age.

2.4 Project overview

2.4.1 Implementation phases - Before the start of the project a consensus meeting was held in Lalitpur wherein key line departments were invited along with local resource groups/NGOs, representatives of the local primary teachers association. The purpose and objectives were agreed upon by concerned health, ICDS, and district authorities. This was followed up by a rapid assessment of the prevailing infant and young child feeding practicesin the three blocks namely Birdha, Talbehat and Jakhaura. The sample size for rapid assessment was 421 monthers

2.4.1.2 Rapid Assessment of infants and Young child Feeding practices at Family level - To begin with in all survey covered 421 mothers. The project was implemented in phases till 2008 the focus was on expansion of the Project and from 2009 the focus was on consolidation and integration of activities into the ICDS and Health system.

2.4.2 Project strategy

The project adopted a two pronged strategy- community based and facility based

Community based - The Community-based approach relied on Mother Support Groups to bring counseling and support on infant and young child feeding closer to mothers and communities. Across the district, 1286 mother support groups were established in 1,124AnganwadiCentres, 96 in habitations primarily inhabited by the Sahariyas`[1] and 66 mother support groups in Majras[2]. A total of 3,858 members visited homes to provide information and counseling support on IYCF, vitamin A supplementation, immunization, care of pregnant women, nursing mothers and children with malnutrition. On an average each member of MSG was responsible for 10-15 households, thus reach was almost universal to pregnant women and children under twos.

The MSGs identified eligible women (pregnant and breastfeeding mothers) and regularly visited their homes at critical times (e.g., to register pregnant women at the earliest, at delivery and closely spaced days post-delivery) and counsel them on age appropriate practices and behaviors during home visits and on weekly Take Home ration days organized on Saturdays.

The home visit schedule was as follows: 10 visits in first 6 months, 6 visits in next 6 months and 3 visits in the 2nd year. The home counseling visits focused on helping mothers with feeding difficulties and in reinforcing optimal IYCF practices by dialoguing with influencers and decision makers within the family.

The community-based strategy also utilized the Saturday meetings organized under the ICDS, as a platform to impart health and nutrition education to target groups. Every week mothers' meeting was organized at the Anganwadi Centre to discuss issues around a particular theme. For example, every second Saturday "God Bharai" was celebrated for pregnant women to promote birth preparedness and early initiation of breastfeeding. The third Saturday was celebrated as "Annaprashan" day to focus on initiating complementary feeding for all infants who had completed six months.

In the meetings MSGs used a combination of techniques for information sharing and counseling, such as demonstrating correct positioning and attachment techniques using a baby doll, discussing ways to overcome breastfeeding difficulties, folk songs, recipe demonstrations, pictorial aids and experience sharing from early adopters.

Facility based Strategy - To complement the community strategy, the project focused on strengthening IYCF counseling services at block health facilities and at District hospital. Initially the project counselors supported health functionaries in providing counseling services to mothers but over a period of time government health functionaries started providing these counseling

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[1] *Sahariya refers to a tribal community in Lalitpur that is most deprived of all benefits and remains socially excluded*
[2] *Majras refer to small hamlets with less no. of households*

services independently. These counseling centers were closely linked to the community and provided additional technical support to mothers referred by the members of the MSGs.

The project involved following set of activities

- **Creating resource pool on IYCF**

Selection of the coordinators and Middle level Trainers - One Project Coordinator, 2 Assistant Project Coordinators and 48 middle level trainers were selected for the project. Middle level trainers were selected amongst social workers, private doctors and retired teachers.

Training of Trainers - After selection all the 48 middle level trainers / frontline workers were oriented by the Project Coordinators supported by Resource faculty. The dept. of Paediatrics, B.R.D. Medical College, Gorakhpur organized the training programme. For the training of middle level/frontline workers, an integrated 3 in 1 training module was prepared jointly by BPNI /IBFAN in collaboration with UNICEF. This module was the core document for training of the front line workers / middle level trainers. The training course was conducted in Hindi.

Creation and training of Mother Support Group (MSG) – At the same time in the each study village, the project identified three women i.e. AWW, Dai (traditional birth attendant) and ASHA—who can act as member in Mother Support Group (MSG). It was thought that these women are always available in the area, and will provide help to mothers in initiating breastfeeding after delivery, counsel them regarding importance of colostrum feeding and continuation of exclusive breastfeeding for a period of 6 months, introducing complementary feeding after that and continuation of breastfeeding for 2 years or so. In case of mothers who are unable to initiate breastfeeding after delivery and likely to depend on bottle feeding, MSG members were trained by middle level trainers to give message to the mothers regarding formation of breast milk and flow, demonstrating correct positioning and attachment and thus initiate breastfeeding rather than depending on bottle feeding. In other words, mother support groups were established under the project in each anganwadi centre to promote and support-optimal infant and young child feeding practices.

In all a total of 1124 MSGs were formed in 1124 AWCs. Each MSG was having 3 members who were trained for the purposes. After reaching the Sehriya and Majras in the phase five and six of the project, a total number of 3858 trained MSG members were available in the study villages.

Training of Front Line Workers (FLWs) - Trainings of AWWs, ASHAs and Dais were carried out in a phased manner in all the six blocks in the District. The duration of training was of 3 days. In each block 30 participants were trained using3 in 1 integrated training module.

Orientation of Functionaries of ICDS and Health Departments – All 24 supervisors of ICDS from 6 blocks of the district were oriented by a team of doctors from BRD Medical College, Gorakhpur. The orientation training was of one day duration based on 3 in 1 integrated training module. In addition, 152 LHVs, ANMs and staff nurses from health and family welfare dept. were oriented in 3 days training. One day orientation training was also arranged for doctors. In all 76 MOs from 6 PHCs of 6 blocks of the district were oriented about breastfeeding and breastfeeding practices.

- **Setting up Counselling Units in community and facility**

Counselling units in Community - As stated, a total of 1124 mother support groups located in villages with AWC and comprising of three members (ASHA, AWW, third woman) were working at community level. The main activities of 1124 MSGs included the following:

- Education to mothers about advantages of breast milk, colostrum, breastfeeding and how to successfully breastfeed.
- Helping young mothers (specially) to learn positioning of baby and thereby ensuring attachment for effective breastfeeding.
  - Prevention of breastfeeding difficulties and breast conditions.
  - Expression of breast milk and "katori" feeding
  - Identification of sick babies and their referral.
- Preparing good quality complementary food using local foods imparting feeding skills for complementary feeding.
- Educating mothers on the amount of food to be given to growing children.
- Mobilizing families for Growth monitoring with AWW doing Growth monitoring
- Reporting

Referral Counselling Units at Block Level - In six blocks, two counsellors were attached on each day at PHCs to counsel and raise awareness among mothers coming at PHC and mothers with infant and child feeding difficulties referred from village counselling units to higher level.

Referral Counselling Units at District Level - Six middle level workers were placed at District Hospital with doctors and health workers (LHV, Nurses, ANMs) as district counsellors. Two district level counsellors were working every working day at District counselling centre located at district hospital.

The Counsellors at block and district levels were responsible for–

- Counselling and advising referred mothers and mothers who are in need in coming to PHC/hospital.
- Helping mothers who delivered in the hospital (which was increasing significantly) with feeding difficulty and also to train/help the hospital para-medical staffs in breastfeeding practices.
- They were also providing education on infant and young child feeding, neonatal care and family life education to mothers.

- These counsellors provided supportive supervision to the MSGs during field visits as well as in sector level meetings.

2.4.3 Setting up a strong Supervision and monitoring system

Monitoring and Supervision of MSGs:

- The project started with 48 IYCF counselors whose main responsibility was to guide the mother support groups in acquiring skills and knowledge to function as effective counselors. During their visit these counselors not only assessed the functioning and working of MSG members but provided solutions for difficult cases encountered in the field. As the mother support groups became adept at handling field situations and addressing community problems, the numbers of counselors were brought down gradually as the monitoring of the functioning of MSGs was taken over by the ICDS supervisors. At the end of the project, a total of 10 IYCF counselors were in position. They were assigned villages where functioning of MSG was not satisfactory

- In order to institutionalize the project interventions within the ICDS, the AWCs were rated as good (A category), average (B category) and below average (C category) using a 13 point scale covering issues like knowledge and skills of the members, number and quality of community meetings conducted number of mothers counseled and indicators related to AWC functioning. The monitoring of these centers was done jointly by BFCHI teams and ICDS Supervisors. Once the centers turned into "model" centers, the responsibility was entirely shifted to ICDS and BFCHI team limited itself only to those centers where indicators were extremely poor.

No.	Indicator
1.	Saturday meetings at ICDS centres in which pregnant, lactating and other women as well as adolescent girls participate (2-3 per month)
2.	Regular weighing of children 0-2 years
3.	Regular and complete immunization of all children
4.	Counselling of 80% women with child 0-2 years through home visits on IYCF, immunization, vitamin A and care and development of severely malnourished children
5.	Participation in every block level meetings (ICDS, Health and BFCHI)
6.	All records (registers) complete in all aspects and properly maintained
7.	Participation in departmental meetings (MPR) and collection of whole information discussed therein
8.	ICDS centre opened regularly and run according to ICDS standards
9.	Complete knowledge about IYCF and counselling of pregnant and lactating mothers
10.	Participation in national programme
11.	Good image of ICDS worker in the community
12.	Adequate IYCF practices adopted by at least 80% of infant
13.	Survey done after every six months

- The centers where behaviors were not found to be improving or where services were not of the desired quality, joint visits were done by the BFCHI staff with DPO/CDPO/Supervisors.

2.5 Regular and joint review at sector, block and district level

- Every month a sector meeting was organised jointly by the BFCHI team and ICDS Sector Supervisor to cover 20-25 MSGs. The sector meetings provided an opportunity to discuss the project progress, reinforce key messages and address constraints faced by MSG members in the field. The Sector meetings which were initially started with the purpose of reviewing BFCHI project later helped in institutionalising the ICDS sector meetings and became a forum to discuss the performance of AWW.

- The district and block level review meetings were also used as opportunity to discuss and review project progress. The BFHI project was also a part of review done during District Level Task Force meetings convened by District magistrate.

CHAPTER 3: Research Design & Methodology

3.1 Geographic Coverage

The geographic coverage of the project area and the survey coverage are as follows-:

Table 3.1: Programme coverage	Survey coverage
One district : Lalitpur	All (100%)
Six blocks: Bar, Birdha, Jakhaura, Madawara, Mehrauni and Talbehat	All (100%)
651 villages	85 (15%)
Families of approximately 40,000 under-two children	850 (2.13%)

3.2 Sampling Design

A two stage sampling design was adopted for the study. The first stage was selection of 85 villages out of total 651 villages from the district which also includes Majras[1] and Sahraiyas[2]and second stage was selection of eligible mothers of children of less than two years from these selected 85 villages. From these villages 85 MSGs were identified and interviewed.

Step 1: Selection of Villages

Lalitpur has a total number of 651 revenue villages covering 6 blocks and urban area.Out of these, 85 villages were selected on the basis of PPS method to ensure randomness of selection. For this complete list of villages with the total population in the district was used using Census 2001 data. No grade wise quota was used for the sampling purpose. These 651 villages consist of Majras and Sahraiyas as well as villages which have MSGs of A, B, C grades and the others not given any grading

Step 2: Selection of Mothers

In the selected village, the list of households in the village was taken from the AWW survey. Respondent household of eligible mother was randomly selected using last digit of a currency note Sampling frame was prepared which comprised of the mothers with children under two years (0-<24 month). Ten mothers were selected from each village- of these four were those with children in the age group 0-5 months and six with children in the age group 6-23.

[1]Sahariya refers to a tribal community in Lalitpur that is most deprived of all benefits and remains socially excluded

[2]Majras refer to small hamlets with less no. of households

[3]ICDS villages refers to villages where AWC is located and community have sufficient access to services functioning and following >=90% set standards as per 13 pointers scale were given grade A, 80-89% grade B and 70-79% - C.

Thus, a total of 838 households were visited across 85 villages. Of these 838 selected households, 338 mothers had children in 0-5 months and 500 mothers had children in the age group 6-23 months.

Interviews were also conducted at the health facilities with 29 mothers who had delivered at these facilities during the period of survey.

Step 3: Selection of Mother Support Groups

From the 85 selected villages all the 85 mother support groups were included in the study and 234 group members present in the village were included in the survey.

3.3 Target respondents and sample coverage

In order to get perspective of all the stake holders on the project, several cadres of respondent were interviewed which are given as follows:

- Project Director
- Project co-ordinator
- District Officials (CMO/ACMO and DPO)
- CDPO
- ICDS Supervisor
- Members of Support Group (AWW/ASHA/AWH/Dai/third women from same village
- Mothers of children ages 0-<24 months
- Mothers who had delivered at health facilities

3.4 Research tools and sample coverage

The study followed a mix-design approach which entails best-fit mix of Quantitative and Qualitative components. A total of 10 study tools were developed for collecting the quantitative and qualitative data.

Table 3.2 Type of Research tools

Quantitative	**No. covered**
Total villages covered	85
Mothers of children (0-<24 months)	838
Qualitative	
In-depth interview of members of MSG	234
In-depth interview of project Director/coordinator	2
In-depth interview of mothers delivered at health facility	29
FGD with Mothers (0-<23 months)	13
FGD with MSG members	25
FGD with BFCHI staff members	1
Observations- Saturday meetings/WHND	14
Strong Case studies on IYCF	10

3.5 Development and finalization of Research tools

The tools were developed in consultation with UNICEF. All the study tools were developed in both in Hindi as well as in English so that sense of asking questions and interpretation of answer given by respondents will have same perspectives.

Pre testing was conducted to replicate the actual evaluation survey and the tools prepared were tested on the target population to capture sufficient evidence for any modifications required to be made in the tools. In addition, Talbehat CHC was also visited by the pre-testing team under the supervision of Team co-ordinator to interact with some of the staff and mothers to get feedback on in-patient facility tool. Some of the questions needed modifications for more clarity and response adequacy. In addition, it was also felt that re-sequencing of some of the questions was required in order to maintain the flow of different questions and their answers. The suggestions as received from the pre testing were subsequently incorporated in the specified evaluation survey tools in consultation of UNICEF Lucknow. The final tools are annexed.

3.5 Recruitment of Field Team

The field team members (20 interviewers and 4 supervisors) were selected on the basis of their past experience in social research. All the members who were recruited to conduct the field survey had exposure of conducting survey on health issues. Before the UNICEF briefing, a one day training was given by the core team members to the prospective field team members on IYCF practices to gauge their understanding regarding the same. The ones who were found to apprehend the topic well were included in the team.

3.6 Training of Field team

The training of field team was conducted from 13th -15th December, 2012at Lucknow. The training was given by iKOnet Senior Researcher who had a prior experience of working in nutrition programmes. The officials from UNICEF were also present during the training. The training was attended by 4 Supervisors and 25 Investigators, and 2 Field Co-ordinators. All the field investigators were experienced in conducting field work with minimum qualification as bachelor's degree. The questionnaires were explained to the field investigators and mock interviews were conducted by the Field Supervisors and Supervised by the core team members to gauge the efficacy of the interviewers.

3.7 Field Survey

Data was collected from 19.12.12 to 21.01.13. It took one complete month to complete the survey

3.8 Management of data

Quantitative data

(a) Data scrutiny-consistency and range check was carried out in order to examine the logical flow of the questionnaire.

(b) Development of software -Data entry was done using customized CsPro software. There were range checks and consistency checks (using skip pattern) to ensure strict quality monitoring. Basic tables were also drawn in SPSS to review the data quality.

(c) Data merging and export - Data of different blocks were merged together in single database and data was exported from CsPro software to SPSS.

Qualitative data

(a) Coding and labeling of audio files were done. All the audio files were transcripted and content analysis of the same was carried out.

3.9 Quality Assurance

(a) During Field Quality Measures

Field control was done at two levels:

Supervisor: The supervisors monitored the field work of the interviewer by accompanying him or making back checks. The interviewer directly reported to the supervisor.

Field Coordinator: Two field coordinators monitored the field work of all the supervisors and the interviewers. They too followed two methods of verification - accompanying and call back check. There was 100% scrutiny of all the questionnaires.

The evaluation agency ensured that:

- All the questions were answered
- Skip pattern was followed
- Open-ended questions were adequately answered
- Respondent detail was mentioned on the first page of the questionnaire
- There is proper legibility
- All contact information has been appropriately recorded.

(b) Post field quality measures

Software preparation: Data entry was done using customized CsPro software. There were range checks and consistency checks (using skip pattern) to ensure strict quality monitoring. Basic tables were also drawn in SPSS to review the data quality.

3.10 Cost Analysis Approach

Programme expenditures were analysed with respect to the performance (achievement of programme indicators) at the block levels. A couple of financial performance indicators leading to long term sustainability were developed in consultation with UNICEF team.

3.11 Limitations of the Evaluation

Comparison with the baseline data – The methodology for assessing IYCF indicator at the end-line survey was based on the global guidelines for IYCF practices whereas the baseline was conducted using a different methodology hence the exact comparison is not possible.

Change in accounting heads – The change in accounting heads in due course of the progress and expansion of the BFCHI implementation and its coverage, has limited the cost analysis to broader cost heads only. Moreover, certain overhead costs such as training of supervisory staff were incurred in the initial phases, but such investments were for long term benefit of the project.

Picture 3.11 2:In depth interview with Anganwadi worker

Picture 3.11 3: In depth interview with ASHA

Picture 3.11 4: **Interview with beneficiary mother**

Picture 3.11 5: **FGD with beneficiary mothers**

CHAPTER- 4 BFCHI Project- Results

This chapter presents findings collected from interviews with mother support group members as well as mothers of children in the age group of 0-<24 months. The findings are presented in following broad sections:

4.1 Mother support group, constitution, characteristics and capacities

4.2 Characteristics of Mothers

4.3 Infant and Young child Feeding behaviors/practices

4.4 BFCHI project and ICDS service quality

4.1 Mother Support Groups and their characteristics

4.1.1 Mother support group constitution in Lalitpur – As per the available records from projects and facts reported by district officials and UNICEF a total of 1286 MSGs were created in Lalitpur during the entire span of the project. These comprised of 3858 members, break- up of the mother support group is represented in Table 4.1.1

Table 4.1.1: Members of MSG	No.	%
AWW	1124	29.1
ASHA	767	20
Third woman from the mother support group	1679	43.5
Women from Sehariya (excluded community)	288	7.4
Total	3858	100

4.1.2 Type of members of MSG interviewed - For the present evaluation 234 members in 85 villages were interviewed details of which are presented in Table 4.1.2

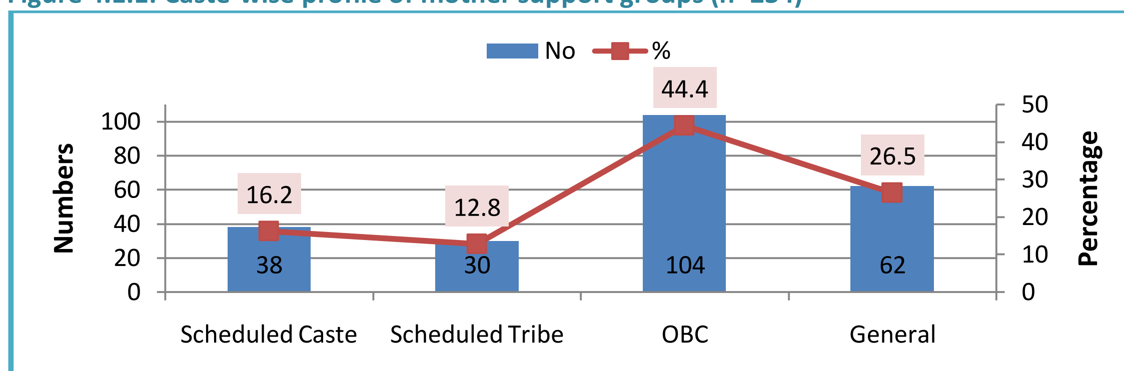
Table 4.1.1: Type of members of MSG interviewed (n=234)	No.	%
AWW	64	27.4
ASHA	50	21.4
Third woman from the mother support group	98	42.0
Women from Sehariya (excluded community)	22	9.4
Total	234	100

4.1.3 Socioeconomic profile of MSG Members - Majority of mother support groups was Hindu and resided in the same village. Table 4.1.3 provides the details

Table 4.1.2: Social and economic profile of MSG Members (n=234)	No.	%
Religion		
Hindu	224	95.7
Muslim	7	3
Jain	3	1.3
Total	234	100
Place of residing		
In same village	218	93.2
At other place	16	6.8
Total	234	100

4.1.4 Caste-wise profile of mother support groups- 73% of the mother support group members belonged to backward, scheduled caste and scheduled tribes as shown in figure 4.1.1.Of these 29% belonged to Scheduled caste and tribe

Figure 4.1.1: Caste-wise profile of mother support groups (n=234)



Source: Survey Data

4.1.5 Educational profile of mother support groups - Of the total mother support members, 59.4% had not completed high school. 15% of the members of mother support groups were illiterate.

Table 4.1.3: Educational profile (N=234)	No	%
Illiterate	35	14.9
Up to primary	3	1.3
Below secondary	101	43.2
High school	48	20.5
Intermediate	23	9.8
Graduate and postgraduate	24	10.2
Total	234	100

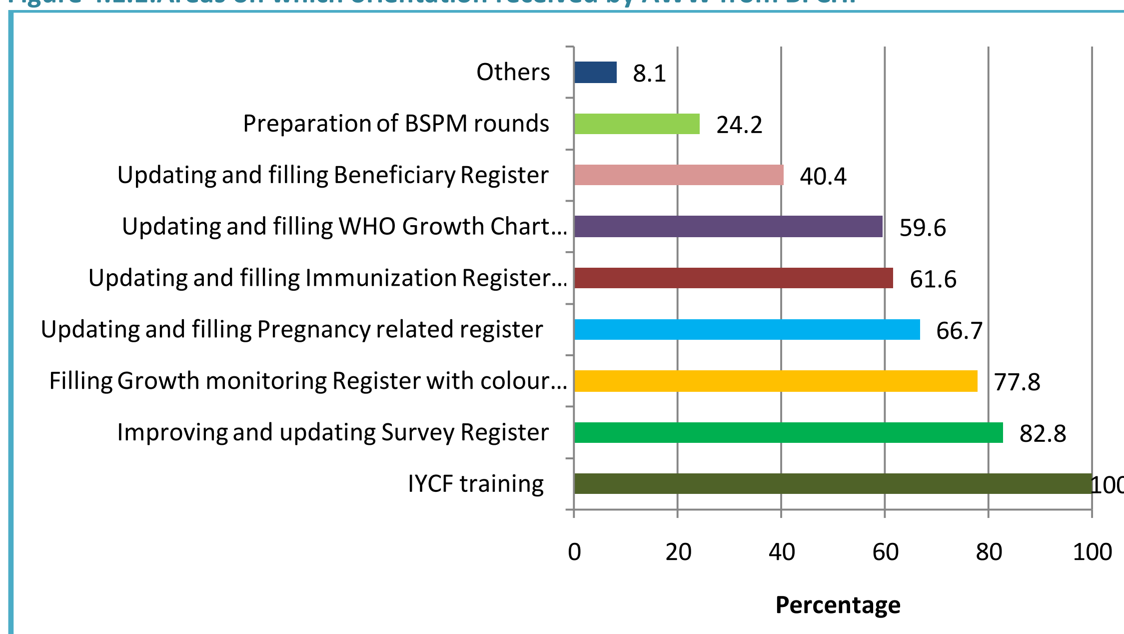
4.1.6 Working experience as a part of MSG - Average experience of 234 members working as a part of MSG was over 4 years 3 months.

4.1.7 Person who influenced the members in becoming a part of MSG team- The table below shows that BFCHI team played an important role in mobilizing and constituting mother support groups. However, in 37% cases AWW was instrumental in creating the groups and mobilizing them for action.

Table 4.1.4: Who influenced members to be a part of MSG	No	%
BFCHI members	137	58.5
AWW	86	36.8
ASHA	11	4.0
Total	234	100

4.1.8 Sensitization of mother support group members - All 234 members of MSGs reported they were trained on Infant and Young child Feeding practices. Out of 64 AWWs interviewed, 42.3% reported that they received orientation on maintaining the records and registers. The orientations on service quality element were held mainly for the AWWs and as stated by AWWs the orientation gave them a better understanding on maintaining using the records in reaching the target groups with ICDS services.

Figure 4.1.1:Areas on which orientation received by AWW from BFCHI



Source: Survey Data

4.1.9 Knowledge and skill levels of MSGs on IYCF related issues - The data shows that the knowledge levels of MSG members were very good in terms of breastfeeding messages (table 4.6). Almost all members (92.7%) had knowledge that the first milk after child birth also known as "*khees*" is very beneficial for the child and helps build immunity. The knowledge levels were slightly less for complementary feeding practices (77.4%) and continuation of breastfeeding for two years and beyond (68.8%).

Most of the Mother support group members were adept and knowledgeable on massaging technique (85.9%) which is used for milk let down by massaging the back of a woman along the vertebral column. The knowledge on expressing breast milk and feeding to child in case of feeding difficulty was satisfactory at 67%. The mother support groups were not towel informed on technical issues related to sore nipples, mastitis or inverted nipples.

From the team of three members of mother support groups, AWWs were separately trained on service delivery component with special focus on survey, growth monitoring and plotting. The skills of AWW children weighing and growth monitoring (assessed by asking them to weigh and plot on growth chart) was found to be very good (97%). With regards to BSPM package, vitamin A was the most known intervention (83.5%)

Table 4.1.5: Knowledge of MSG on technical issues

Knowledge of MSGs on IYCF Practices (n=234)	**No.**	**%**
Breastfeeding initiation within one hour of birth	231	98.7
Colostrum not be discarded	217	92.7
Pre-lacteal feeds to be avoided	229	97.9
Avoid bottle feeding	225	96.2
Exclusive Breastfeeding up to 6 months	230	98.3
Breastfeeding to be continued to child up to 2 years or beyond	161	68.8
Complementary food to be initiated after 6 months	181	77.4
Knowledge of MSGs on managing breastfeeding difficulties (n=234)		
Managing sore nipple	71	30.3
Managing inverted nipple	89	38.0
Managing breast mastitis	104	44.5
Correct technique for squeezing and expressing milk	156	66.6
Massaging technique for milk let down	201	85.9
Knowledge of AWW on Growth monitoring (n=64)		
AWWs knowledge on weighing child accurately	63	98.4
Estimate correct age of child	62	96.9
AWWs knowledge on weighing of 0-3 yrs children monthly	64	100
AWWs knowledge on weighing of 3-5 yrs children quarterly	60	93.8
Counsel the mother on child's growth	60	93.8
Interpret the plotted point and growth curve direction	62	96.9
Plot weight correctly on growth chart	62	96.9
Knowledge of AWW on BSPM (n=64)		
Identification and referral of severely malnourished children	17	26.2
Promotion of IYCF practice's	48	75.7
Promotion of Iodized Salt	49	76.7
Vit. A supplementation	53	83.5

Picture 4.1 1: AWW weighing the child

Picture 4.1 2: knowledge assessment of AWW on correct filling of WHO growth chart

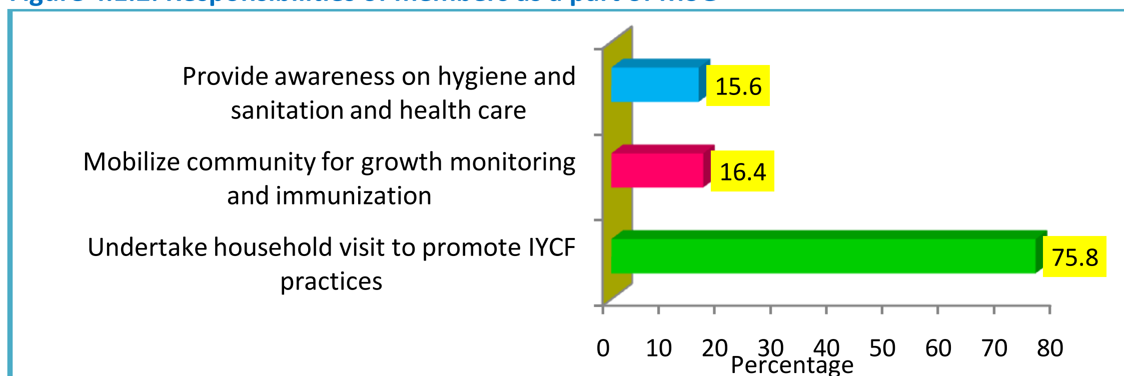
Picture 4.1 3: Promotion of Vitamin A supplementation in AWC

Picture 4.1 4: Promotion of Iodized Salt in AWC

4.1.10 MSGs understanding of responsibilities of members of MSG - Almost 75.8% of the MSG members mentioned that their primary responsibility was to undertake household visits to reach pregnant women and children under 24 month of age for counseling on IYCF practices. Other responsibilities of the members as part of MSG included, increasing awareness on hygiene and sanitation (15.6%), mobilizing the community for growth monitoring and immunization and providing advice on health seeking behavior (16.4%).

During FGD, almost all the members of MSGs mentioned that they reach the target groups through home visits and also motivate them to visit AWC for availing services and counseling. Each MSG was allotted 15-20 households in their geographic area and the visits were undertaken based on the critical times and needs of the families. For example if there is any pregnant women in their area, they visit her and counsel her and her family to visit sub centre/facility for antenatal check-up, T.T injection, IFA tablets ,consuming green vegetables and taking one extra meal for child. They also advised her to initiate breastfeeding within one hour and not give anything prior to introducing breast milk. Special efforts were made to counsel mothers to abstain from giving honey which was a prevalent practice in the work area of MSG.

Figure 4.1.2: Responsibilities of members as a part of MSG



Source: Survey data

4.1.11 Literacy levels of MSGs and awareness on the four key IYCF messages - The table below shows that the knowledge levels of MSGs on optimal IYCF messages i.e. *(early initiation of breastfeeding, exclusive breastfeeding up to six months, introduction of complimentary feeding and continuation of breast feeding up to 2 years or beyond)* was very good and that more than 67% mother support groups were aware on four key messages irrespective of their educational status. The table also shows that the awareness level of ASHA (70%), third woman (69.4%) on all four IYCF messages was better as compared to AWW (64.1%) and women from Sehariya (54.5%).

Table 4.1.6: literacy levels of MSGs and awareness on the four key IYCF messages

Awareness on 4 key messages based educational Status of MSG	**Awareness level of MSG on IYCF vis-a-vis educational status**							
	All 4 IYCF messages		**3 IYCF messages**		**Only 1 IYCF messages**		**Don't know**	
	N	**%**	**N**	**%**	**N**	**%**	**N**	**%**
Illiterate (n=35)	23	65.7	11	31.4	1	2.9	0	0
Up to Primary (n=3)	2	66.7	1	33.3	0	0.0	0	0
Below secondary (n=101)	56	55.4	39	38.6	3	3.0	3	3.0
High school (n=48)	36	75.0	12	25.0	0	0.0	0	0
Intermediate (n=23)	16	69.6	7	30.4	0	0.0	0	0
Graduate and post graduate (n=24)	23	95.8	1	4.2	0	0.0	0	**0**
Total	156		71		4		3	
Awareness on 4 key messages based on type of member of MSG	**All 4 IYCF messages**		**3 IYCF messages**		**Only 1 messages**		**Don't know**	
	N	**%**	**N**	**%**	**N**	**%**	**N**	**%**
AWW (n=64)	41	64.1	22	34.4	1	1.6	0	0
ASHA (n=50)	35	70.0	14	28.0	1	2.0	0	0
Third woman from the mother support group (n=98)	68	69.4	30	30.6	0	0	0	0
Women from Sehariya (excluded community) (n=22)	12	54.5	5	22.7	3	13.6	2	9.1

4.2 Characteristics of mothers:

4.2.1 Household Characteristics - Out of the 838 mothers interviewed, 338 had children aged (0-5 months and 29 days) and 500 had children aged between (6-23 months and 29 days).

Majority of the mothers interviewed were Hindus (97.7%) and 90% belonged to backward, SC and ST category. The total ST families in the sampled population were 14.2% which is almost fourteen times of that in the state (1%).

Majority of the households (89.3%) had water supply through Bore well/hand and In-house tap/ stand pipe in local area clearly indicating access to safe source of drinking water. However access to toilet facility was poor with 80.4% families practicing open defecation. Only 16.5% of the households had safe sanitation facilities.

Table 4.2.1: Household Characteristics

Religion	**No.**	**%**
Hindu	819	97.7
Muslim	18	2.1
Jain	1	0.1
Caste Group		
OBC	430	51.3
Scheduled Caste	205	24.5
Scheduled Tribe	119	14.2
General	84	10.0
Socio-Economic Status		
APL	389	46.4
BPL	190	22.7
Others	259	30.9
Source of Drinking Water		
In-house tap/ Stand-pipe in the local area	253	30.2
Bore-well/Hand pump	495	59.1
Well	88	10.5
River/Stream/Pond	2	0.2
Type of Toilet		
Open field/space	674	80.4
Dry Latrine	26	3.1
Single/Double pit latrine	9	1.1
Latrine with septic tank	102	12.2
Flush toilet	27	3.2

4.2.2 Mother's educational status - Almost half the respondents were illiterate (49.2%) with remaining half (45.8%) not completing the upper primary/secondary schooling. Almost 62% of the respondent reported that they had got married before the age of 18.

Table 4.2.2: Respondent characteristics		
Age of Mother	**No.**	**%**
15 – 19	50	6.0
20 – 24	400	47.7
25 – 29	251	30.0
30 – 34	101	12.1
35 – 39	29	3.5
40 – 44	7	0.8
Education status of Mother		
Illiterate	412	49.2
Up to Primary	138	16.4
Secondary	247	29.4
Higher Secondary	22	2.6
Under Graduate/Graduate	11	1.3
Post Graduate	8	0.9
Age at Marriage of Mother		
<18	519	61.9
>18	319	38.1
Total no. of children		
1-2	531	63.4
>=3	307	36.6
Total	838	100

4.2.3 Awareness regarding existence of MSG in Village - The knowledge on existence of mother support group was almost universal with 95% respondents confirming about their presence in the village. With regards to the members constituting the mother support group, AWW was the most visible face of mother support group with 76% respondents confirming AWWs role. This was followed by awareness about other women from the community (70%) followed by ASHAs (57%).

Table 4.2.3: Awareness regarding existence of MSG in Village (n=838)		
Indicators	**No.**	**%**
Mothers awareness on existence of MSG in the Village	793	94.6
Awareness on type of members of MSG		
AWW	636	75.9
ASHA	476	56.8
Third Women from village	582	69.5

4.2.4 Visit by MSG members during different periods of continuum of care - Based on the response from mothers table below shows that more than 85% mothers were visited by the MSG members during the three critical phases of behavior change i.e. pregnancy, post-delivery and after six month

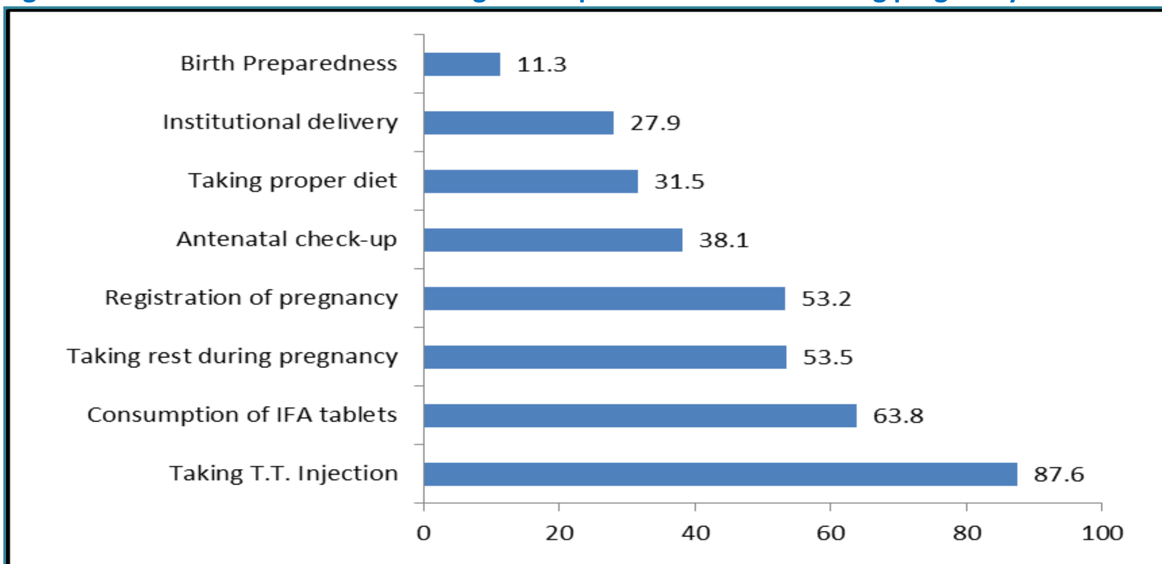
Table 4.2.4: Visit by MSG members during different periods of continuum of care			
	Total sample	**Families visited**	**%**
Pregnancy	838	730	87.1
During the first six months	338	303	89.6
After six months till two years	500	459	91.8

4.2.5 Counseling by MSG members during different periods of continuum of care - Based on the response from mothers table below shows that in terms of counseling AWW was the most active member of the MSG with more than two third mothers confirming that AWW visited them for counseling during pregnancy (67%), lactation (70%) and post lactation phase (78%).

Table 4.2.5: Visit by MSG members during different periods of continuum of care						
MSG member	**Pregnancy (n= 838)**		**During the first six months (n= 338)**		**After six months till two years (n = 500)**	
	No.	**%**	**No.**	**%**	**No.**	**%**
AWW	522	66.8	213	70.2	357	77.9
ASHA	501	64.1	202	66.7	290	63.3
Third woman of MSG	501	59.8	208	61.5	251	50.2

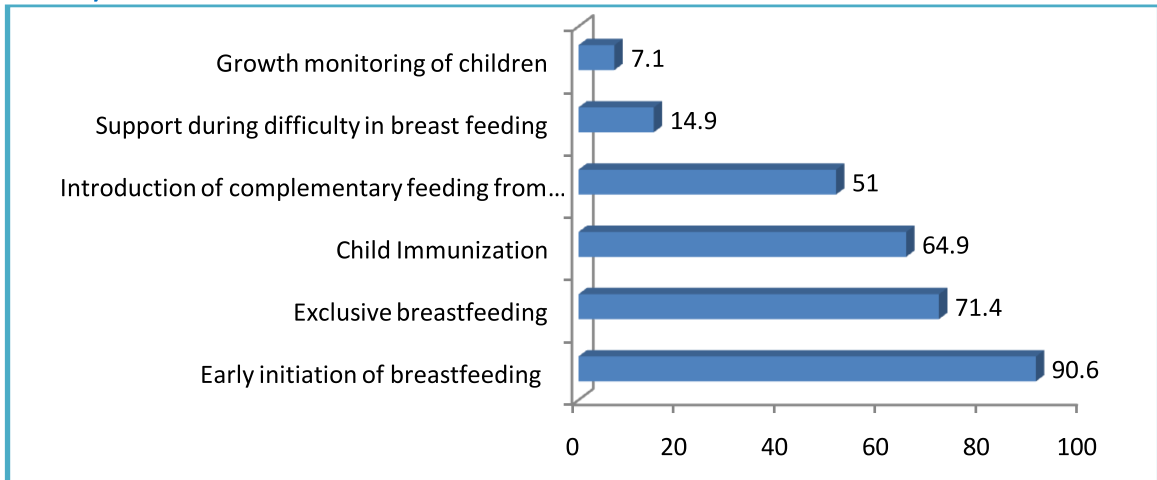
In terms of counseling by MSGs, the response from mothers reflects that MSGs counseled mothers during all the phases of the continuum – pregnancy (93.4%), during lactation phase (71% on exclusive breastfeeding and 91% for timely introduction of complementary feeding) as well as in period from 6 month- 23 months (96% respondents said that they were informed on timely introduction of complementary feeding).

Figure 4.2.1: Issues on which counseling was imparted to mothers during pregnancy



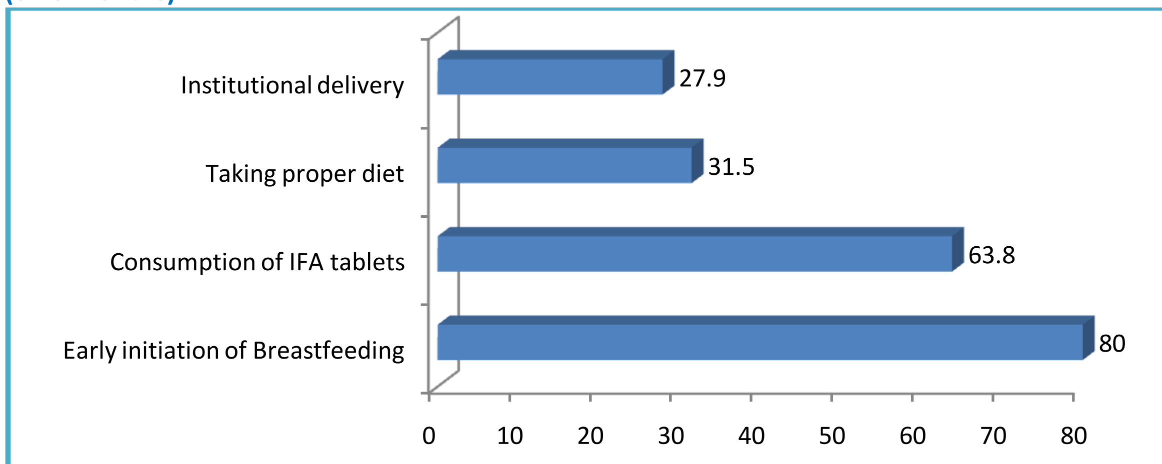
Source: Survey Data

Figure 4.2.2: Issues on which counseling was imparted to mothers in the lactation phase (0-6 months)



Source: Survey Data

Figure 4.2.3: Issues on which counseling was imparted to mothers in the post lactation phase (6-23 months)



Source: Survey Data

Case Study 1: Home based MSG counseling by MSG group in Madawara village to promote exclusive breastfeeding

Mira, a 19 year old girl from Madwara village was married off at an extremely early age of 16. Becoming pregnant at the age of 19 was however a major turning point in her life. With no recourse to help and support from her parents, she was extremely apprehensive about her pregnancy and the impeding birth of her child. Her fears were however laid to rest by the active and efficient member of Mother Support Group in Madwara village.

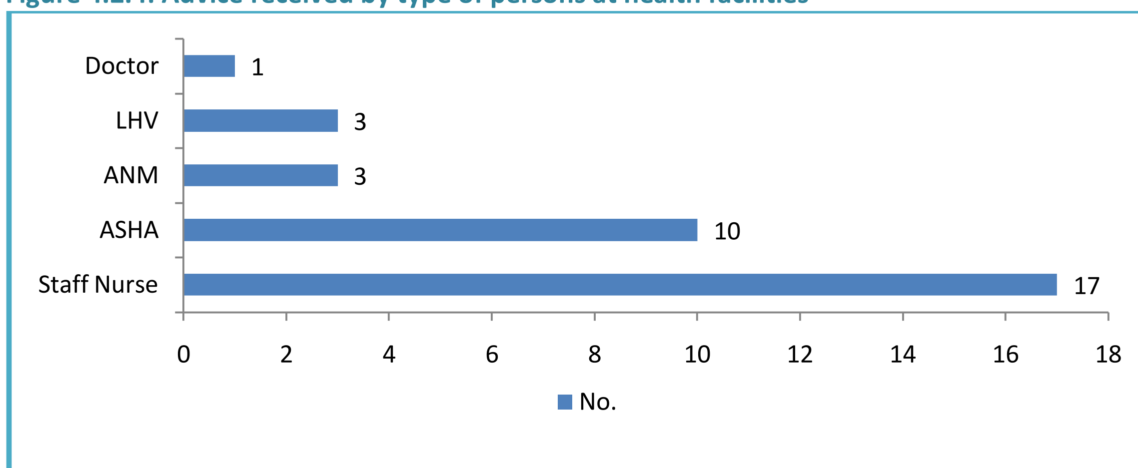
The regular visits and counseling from MSG member Radha "behanji" the third women from the group of same village motivated her to opt for institutional delivery. Post her return to the village, the MSG provided counseling and guidance on appropriate care thereafter. Mira was also motivated to attend the AWC meetings regularly, which further enhanced her knowledge and awareness about effective childcare like early initiation of breastfeeding, exclusive breastfeeding for the first 6 months and complementary feeding thereafter.

The Mother Support Group even counseled her husband and mother in law on maternal and child health care and on the benefits of safe sanitation and hygiene to not only the new born but to the entire family. Mira was also effectively counseled on the immense benefits of breastfeeding to not only the health of the child but also with respect to her health and wellbeing in the near future.

Mira therefore quite enthusiastically propounds the generosity of the MSG members by saying that that most of the days the "behanji" comes to counsel her about the health of her darling baby. She shared that "I thought that the "behanji" so young would probably have no personal experience of breastfeeding, but when she helped me to feed my baby properly, I realized that age has no connection with the ability to convince families, it's the commitment which counts".

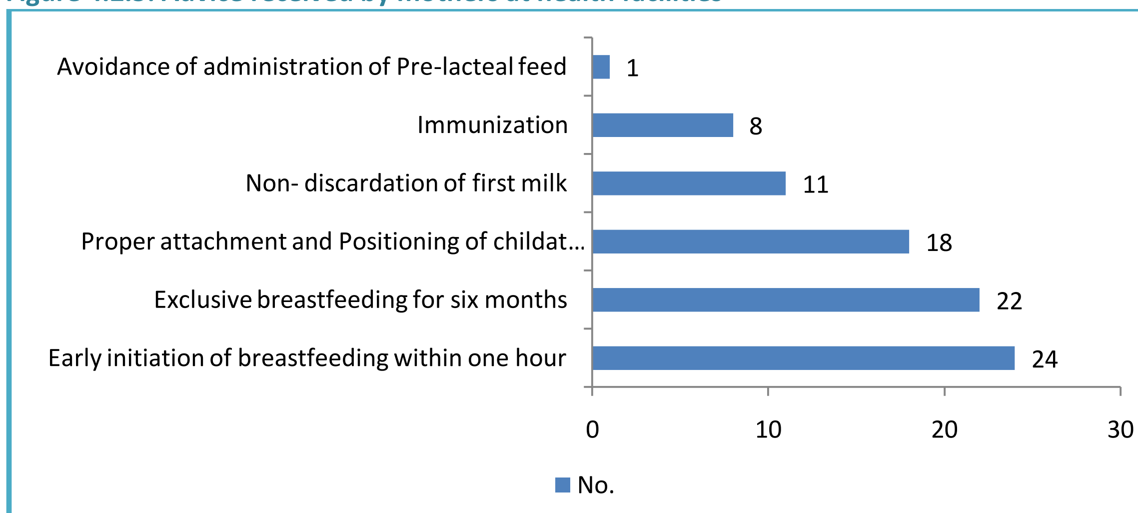
4.2.6 Counseling received at health facilities - A total of 29 mothers who had delivered within last two days of visit were interviewed at health facility. Of these 28 (97%) were weighed at the hospital. Majority of the mothers mentioned that they had received IYCF practices related counseling at the health facility (83%). The most common source of counseling was the staff Nurse (70.8%) followed by ASHA accompanying the family to the facility (41.7%). Almost all of the mothers were counseled on initiating breastfeeding within one hour, while 91.7% mothers were counseled on exclusive breastfeeding to children for first six months, 75% received advise on proper attachment and positioning, 45.8% were advised to avoid discarding breast milk, only one mother was advised to avoid pre-lacteal feed to child. Nearly, 80% of the mothers mentioned that they had also received these messages in the field from members of mother support group.

Figure 4.2.4: Advice received by type of persons at health facilities



Source: Survey Data

Figure 4.2.5: Advice received by mothers at health facilities



Source: Survey Data

3.3 Infant and Young Child Feeding Practices/ Behavior in the community

4.3.1 IYCF practices vis-a-vis Place of delivery - Of the 838 mothers interviewed 77.4% reported that they had delivered in a government facility, 4% at a private facility and 18.5% at home. The table below shows that nearly 85% of mothers who delivered at a government facility reported that they had started breastfeeding within one hour of delivery.

Table 4.3.1: IYCF practices vis a vis place of delivery

IYCF practices	Place of delivery							
	Government Hospitals (n=649)		Private Hospitals (n=34)		Home delivery (n=155)		Total (n=838)	
	No.	%	No.	%	No.	%	No.	%
Early initiation of breastfeeding	549	84.6	19	55.9	115	74.2	683	81.5

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4.3.2 IYCF practices (Core indicators) – The breastfeeding practices of the family were found to be good, almost 82% mothers reported that they had started breastfeeding within one hour of birth. 94% children were exclusively breastfed for six months and 83% children were introduced complementary foods in time. While timely introduction of feeds was found good, the indicators with regards to dietary diversity were extremely poor with only 22% families providing food from four or more food groups. Minimum acceptable diet, an indicator incorporating meal frequency and dietary diversity was also found to be very poor.

Table 4.3.2: IYCF practices (Core indicators)

S. No	Indicator name	Sample	Practices	(%)
Core Indicators				
1	Early initiation of breastfeeding (Proportion of children born in the last 24 months who were put to the breast within one hour of birth)	838	683	81.5
2	Exclusive breastfeeding (Proportion of infants 0–5 months of age who are fed exclusively with breast milk)	338	316	93.5
3	Continued breastfeeding at 1 year (Proportion of children 12–15 months of age who are fed breast milk)	151	148	98.0
4	Introduction of solid, semi-solid or soft foods (Proportion of infants 6–8 months of age who receive solid, semi-solid or soft foods)	82	68	82.9
5	Minimum dietary diversity (Proportion of children 6–23 months of age who receive foods from 4 or more food groups)	500	111	22.2
6	Minimum meal frequency (Proportion of breastfed and non-breastfed children 6–23 months who receive solid, semi-solid, or soft foods (also include milk feeds for non-breastfed children) three times or four or more times)			
i)	Breastfed children (6-8 months) – two times (N=80)	80	59	67
ii)	Breastfed children (9-23 months)- three times (N=386)	386	297	77
ii)	Non- Breastfed children (6-23 month) -Four times (N=34)	34	20	58.8
7	Minimum acceptable diet (Proportion of children 6–23 months of age who receive a minimum acceptable diet (apart from breast milk)			
i)	Breastfed children	466	48	10.3
ii)	Non Breastfed children	34	5	14.7
8	Consumption of iron-rich or iron-fortified foods (Proportion of children 6–23 months of age who receive an iron-rich food)	500	218	43.6

4.3.3 IYCF practices (Optional indicators) - All children in the study group had received breast milk at some point in time. 92% mothers were found to be practicing age appropriate breastfeeding and 78% mothers continued breastfeeding for at least two years. Out of 34 children who did not receive breast milk, only 18% children received milk as per the recommended feeding guidelines

Table 4.3.3: IYCF practices (Optional indicators)

S. No	Indicator name	Sample	Practices	(%)
1	Children ever breastfed Proportion of children born in the last 24 months who were ever breastfed	838	838	100
2	Continued breastfeeding at 2 years (Proportion of children 20–23 months of age who are fed breast milk)	69	55	77.9
3	Age-appropriate breastfeeding Infants 0–5 months of age who received only breast milk during the previous day AND Children 6–23 months of age who received breast milk, as well as solid, semi-solid or soft foods, during the previous day (n=453)	838	769	91.8
4	Predominant breastfeeding under 6 months (Proportion of infants 0–5 months of age who are predominantly breastfed during the previous day)	338	312	92.3
5	Bottle feeding (Proportion of children 0–23 months of age who are fed with a bottle during the previous day).	838	119	14.2
6	Milk feeding frequency for non-breastfed children (Proportion of non-breastfed children 6–23 months of age who receive at least 2 milk feedings)	34	6	17.7

Case Study 2-Helping mother to breastfeed properly

Purna was a young Sahariya girl from the Bar Block in Lalitpur. Having grown among extremely limited means of sustenance and with no access to education, she was married off at a fairly early age of her life. Burdened with family responsibilities post marriage with low or little support from her in laws, getting pregnant was one of the most trying times of her life. Lack of access to proper health care facilities being the norm in most Sahariya villages, compounded with generations of superstition and blind customs had predestined Purna and her yet unborn child to a life of deprivation from the very beginning.

*The village had no AWW and ASHA. The team of BFCHI identified, Geeta and Kastura as members of the MSG group. Identifying the need for support and guidance required by Purna, Geeta and Kastura began to regularly visit Purna. After initial reluctance, Purna slowly began to open uptoGeeta and Kastura'scounselling and started taking care of her health more diligently, ensuring ample periods of rest in between, appropriate meals during the course of the day and going for antenatal checkups. Taking iron tablets was however becoming a problem for her. After taking it for a few days, increasing bouts of nausea and vomiting, she stopped the supplements. Recognizing the importance of iron tablets during pregnancy and for the growing baby, Geeta and Kastura suggested her to visit a doctor in Bar for treatment and guidance. With gradual care and support from the MSG members, her sickness reduced soon after, and she gradually adapted to the side effects of the iron tablets. Facilitating and counseling Purna for institutional delivery was another aspect of the active participation of the MSG members. Giving birth to a healthy baby girl was a blessing for Purna. The support of Geeta and Kastura continued even after the delivery and they regularly visited the household for counseling on breastfeeding prcatices. Purna appreciates the untiring support of the MSG members especially Geeta and Kastura by saying that, "I am grateful to the members of MSG, specially*Geeta and Kastura for their untiring help and support. I have complete faith in them and am sure that their efforts will help all the women and children of our village". Today her daughter is 2 years old and Purna gets her regularly weighed at the AWC located in the adjacent village. The words of Purna therefore not only reflect the inspiring effort by the MSG members in increasing access to health and child care but also the ever increasing role as 'change agents' to the greater part of the rural community in Lalitpur.

Case Study 3– Timely initiative by MSG to start early breast feeding

In Narahat village (Madwara Block), Sushma was an illiterate woman in her mid 20s, staying with her husband and in-laws, who had given birth to a baby girl in her home itself. She was however counseled several times by the MSG members while she was pregnant. Counseling ranged from pre-requisites of child-care: health, cleanliness to effective IYCF practices. Motivated by such active counseling, Sushma had also attended the AWC meetings regularly to enrich her knowledge and awareness of effective child care practices. The MSG members, Kamala (AWW), Bhagwati (ASHA) and Nimla (third woman) who is working as a Dai in this AWC also advised her to register herself for TT injections post pregnancy, to take iron folic tablets regularly and to rest whenever possible. Such efficient counseling and support was the major driver for her relatively better health status in the antenatal period.

Unfortunately during labour, Shushma'slabour pain became so unbearable that she could not be taken to the hospital. The child was delivered at home with the help of Dai, a neighborhood woman and her mother in law. When the MSG members came to know of Sushma's sudden delivery they were worried and they visited Sushma the next morning. When they asked Sushma about breast-feeding the new-born infant, they were shocked to hear that Sushma had not yet started breast-feeding the infant since her mother-in-law had forbidden her to, saying 'pilagadadoodh' (Colostrum) or the mother's first oozing thick milk should not givento the child because they believed that feeding the first yellow milk could harm the new born child. But the mother's first milk should have been fed to the child; it's an ordinance for all mothers who want to see their children happy and healthy. Every child in every nook and corner of the world is entitled to the right to be breastfed within one hour of birth but for these two days the new born was fed only honey, water and gutti (not good for the health of an infant)The MSG members, on encountering such blind superstitions, immediately called on Sushma's mother- in -law and counseled her as well as the other members of her family, on how important colostrum was for a new born child, and also the immense value of exclusive breast feeding for the first 6 months. Such counseling was initially resisted, but gradually, visual and logical pointers used by the MSG members broke down the barrier, and the mother in law gladly agreed to supporting her daughter in law and all her future daughters in laws with respect to effective child care especially on the benefits of colostrum and exclusive breastfeeding.

When Shushma was asked to breastfeed the baby, the MSG members observed that she was not breastfeeding the child from both her breasts. When asked why, she complained that her right breast was paining. On examination, the ASHA found that her right breast had swollen and had a cracked nipple. The ASHA advised Sushma to continue feeding the baby from the left breast and in the meanwhile the ASHA began to diligently massage Sushma' shoulder and back with the expertise she had, for two consecutive days. Sushma was also given hot fomentation between her breasts to relieve the pain. On the third day, finally, Sushma's pain receded and the cracked nipple healed. She began to breastfeed her child normally soon after. With the help of the MSG therefore, says Sushma she has not only a healthy child but also a happy one. Her own health had improved considerably and she thanked the timely support of the MSG members for most of it.

4.3.3 Comparison of Infant and Young Child Feeding Practices with the baseline - A baseline pre-intervention assessment was done in year 2006 to assess the prevailing practices related to Infant and Young child feeding practices. The baseline was done in the three blocks of Birdha, Jakhora and Talbhet by the BFCHI team. Under the baseline survey, 421 mothers of four different age groups (0-3 months), (3-6 months), (6-12 months) and (12-24 months) were interviewed.

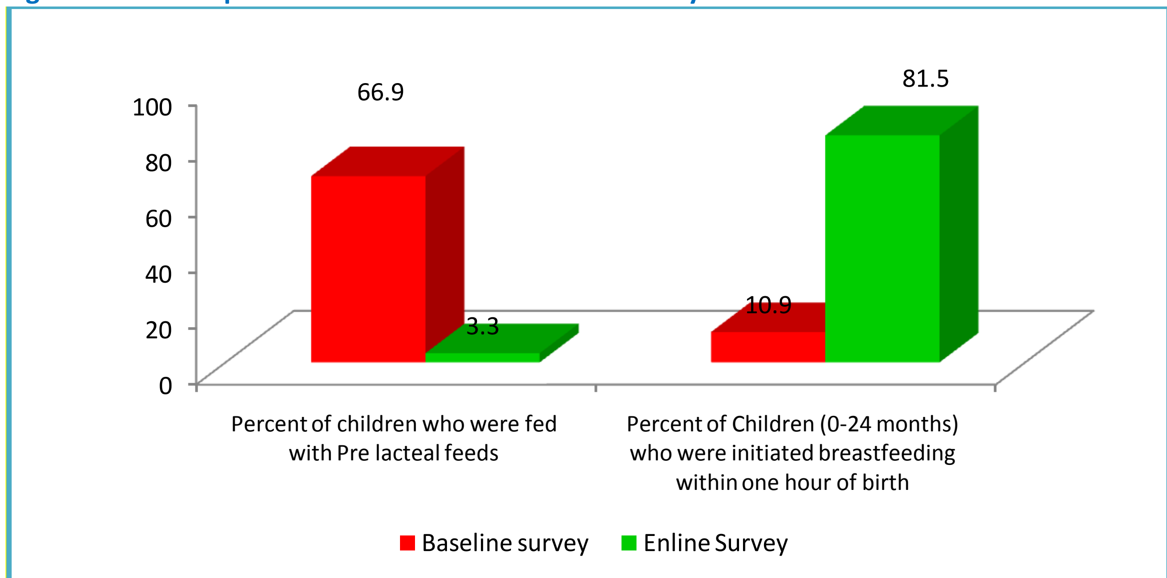
In comparison, during the end line evaluation, 838 mothers of were interviewed those having children in the age group of 0-5 months and 6-23 months. Both of the surveys adopted a different methodology and different instrument (global guidelines on IYCF indicators had not been released in 2006).

Therefore, the findings of baseline and end line evaluation are not strictly comparable and only an indicative comparison has been done

The findings of comparison of achievement made in the project with respect to IYCF practices with baseline survey reveal that –

- Percent of children who were given Pre lacteal feeds has decreased from 66.9% to 3.3%.
- Percent of Children who were initiated breastfeeding within one hour of birth has increased from 10.9% to 81.5%.

Figure 4.3. 1: Comparison of indicators of baseline survey with end line evaluation

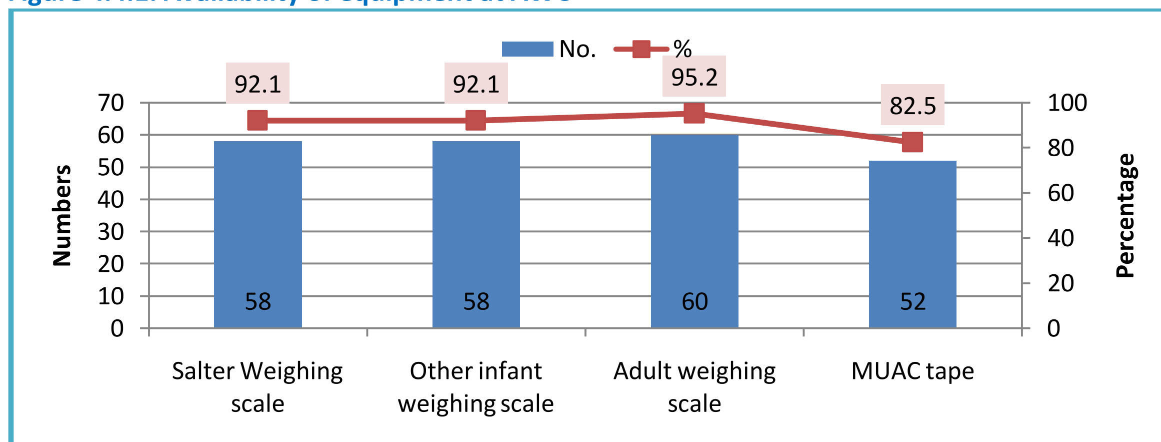


Source: Survey Data

4.4 BFCHI Project and AWC performance

4.4.1 Availability of logistics and equipment at AWC-A total of 64 AWCs were visited by the team. The AWC were found well equipped with logistics and instruments as shown in figure 4.4.1

Figure 4.4.1: Availability of equipment at AWC



Source: Survey Data

4.4.2 Availability and maintenance of records and registers at AWC - The records and registers were found to be well maintained and updated at the AWC and no major difference could be observed across the different grades of AWC i.e. grade A, B and C. The AWCs were graded based on 13 point scale covering indicators on MSG as well as service delivery at AWC. Updation of records was found to be poor in non- graded AWC

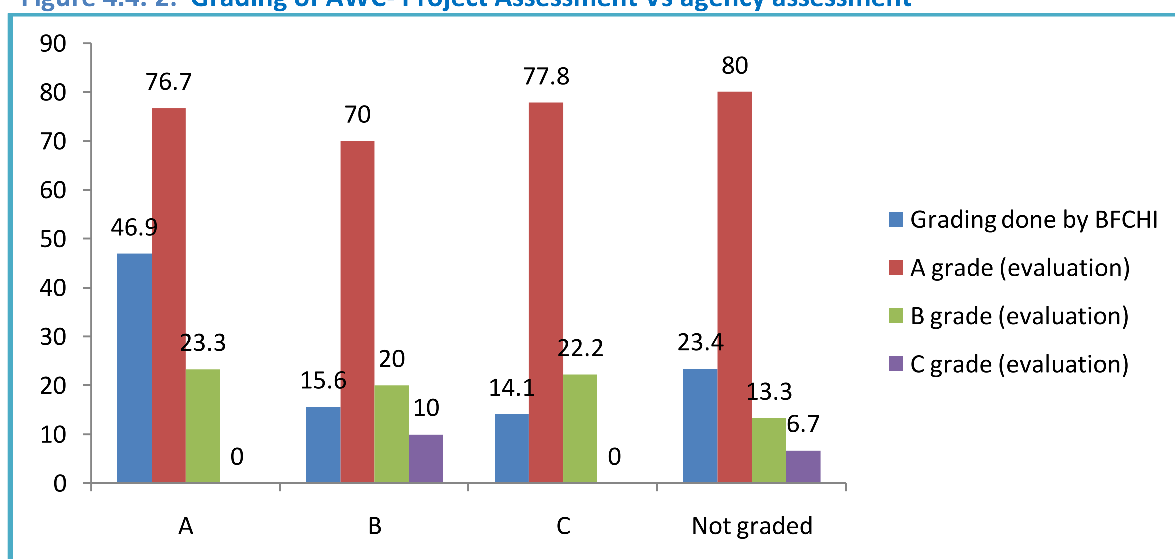
Table 4.4. 1: Availability and maintenance of records and registers at AWC

Grade A (n=30)	**Available (%)**	**Maintained (%)**	**Updated (%)**
Mother child Protection card	**75.9**	**The MCPC at AWC not filled. So information not present**	
WHO Growth monitoring register	93.1	90	73.3
Survey register	100	90	76.7
Beneficiary register	100	96.7	83.3
Pregnancy related register	100	96.7	93.3
Immunization register	96.6	90	76.7
Grade B (n=10)			
WHO Growth monitoring register	90	100	80
Survey register	100	90	70
Beneficiary register	100	100	90
Pregnancy related register	90	100	80
Immunization register	100	90	70
Grade C (n=9)			
WHO Growth monitoring register	44.4	44.4	44.4
Survey register	100	100	33.3
Beneficiary register	100	100	100
Pregnancy related register	88.9	100	100
Immunization register	100	88.9	77.8

	Available (%)	Maintained (%)	Updated (%)
Not Graded (n=15)			
WHO Growth monitoring register	80	80	66.7
Growth monitoring register	86.7	100	60
Survey register	86.7	86.7	73.3
Beneficiary register	86.7	80	66.7
Pregnancy related register	93.3	93.3	86.7
Immunization register	60	73.3	53.3

4.4.3 Grading of AWC- Project Assessment Vs agency assessment - Some mismatch was found in the grading that was reporting by the project team and what emerged in the findings of assessment team. Of the total which were reported as A grade by project only 77% were found to be conforming to the norms.

Figure 4.4. 2: Grading of AWC- Project Assessment Vs agency assessment



Source: Survey Data

CHAPTER 5: Key Findings

This chapter describes the key findings in terms of scope of evaluation.

5.1 Achievement of BFCHI project in terms of planned milestones

5.1.1 Project Coverage

- At the community level, a total of 1286 MSGs comprising of the AWW, ASHA and a local woman were formed across all the intervention villages to promote infant and young child feeding practices. Of these 1124 mother support groups worked in villages with an AWC, 96 MSGs worked in villages inhabited by Sehariy as i.e. the tribal population of district Lalitpur and 66 MSGs worked in Majras which were mostly excluded hamlets of the main villages. The 1286 MSGs comprised of 3858 members who were involved in providing quality counselling and support to families on optimal infant and young child feeding practices. They reached approximately 75,000 families of under twos regularly with key messages on IYCF.

- At the health facility level, 228 district hospital staff of CHC/PHC was trained to act as IYCF counselors for families visiting the facility for institutional deliveries or for immunization services. These facilities functioned as referral points for IYCF related problems and become baby friendly.

- The hospital staff reinforced the messages already received by the family through MSGs and this was critical in motivating families to adopt the right behavior. The positive findings of evaluation and qualitative feedback confirm this fact.

5.1.2 Knowledge levels of Mother support groups

- Almost all members of MSG (92.7%) were aware about colostrum and its role in building immunity. The knowledge levels on early initiation and exclusive breastfeeding was universal (>98%) but gaps were observed for other two messages i.e. timely introduction of complementary feeding practices (77.4) and continued breastfeeding for two years and beyond (68.8).

- The awareness level of ASHA (70%), third woman (69.4%) on all four IYCF messages was better as compared to AWW (64.1%) and women from Sehariya (54.5%) community.

- Most of the MSG members knew about *massaging* (85.9%), a popular technique used in women complaining about problems associated with milk let down. 67% MSG members knew that it was better to feed a child on expressed milk when the breast conditions were not suitable for breastfeeding. The mother support groups however were not very knowledgeable when it came to technical issues like those related to management of sore nipples, mastitis or inverted nipples.

5.1.3 Infant and Young Child Feeding Practices in the Community

- Adequate IYCF practices (early initiation, feeding of colostrum, exclusive breastfeeding and introduction of appropriate complementary feeding after six months) –

  The breastfeeding practices in the families was found to be good with almost 82% families initiating breastfeeding within one hour of birth, 94% families practicing exclusive breastfeeding and 83% families introducing complementary feeds between 6-8 months of age.. While timely introduction of feeds was found good in the study community, the indicators with regards to dietary diversity were poor with only 22% families providing food from four or more food groups. Minimum acceptable diet, an indicator incorporating meal frequency and dietary diversity was grossly inadequate 10.3% for breastfed and 14.7% for non- breastfed infants.

  The findings indicate that while MSGs were able to influence early initiation, exclusive breastfeeding and timely introduction, they were not able to adequately address the quality and appropriateness of complementary feeding.

Table 5.1. 1: Infant and Young Child Feeding Practices in the Community

S. No	Indicator name	Sample	Practices	(%)
Core Indicators				
1	Early initiation of breastfeeding (Proportion of children born in the last 24 months who were put to the breast within one hour of birth)	838	683	81.5
2	Exclusive breastfeeding (Proportion of infants 0–5 months of age who are fed exclusively with breast milk)	338	316	93.5
3	Continued breastfeeding at 1 year (Proportion of children 12–15 months of age who are fed breast milk)	151	148	98.0
4	Introduction of solid, semi-solid or soft foods (Proportion of infants 6–8 months of age who receive solid, semi-solid or soft foods)	82	68	82.9
5	Minimum dietary diversity (Proportion of children 6–23 months of age who receive foods from 4 or more food groups)	500	111	22.2
6	Minimum meal frequency (Proportion of breastfed and non-breastfed children 6–23 months who receive solid, semi-solid, or soft foods (also include milk feeds for non-breastfed children) three times or four or more times)			
i)	Breastfed children (6-8 months) – two times (N=80)	80	59	67
ii)	Breastfed children (9-23 months)- three times (N=386)	386	297	77
ii)	Non- Breastfed children (6-23 month) -Four			

Table 5.1. 1: Infant and Young Child Feeding Practices in the Community				
S. No	Indicator name	Sample	Practices	(%)
	times (N=34)	34	20	58.8
7	Minimum acceptable diet (Proportion of children 6–23 months of age who receive a minimum acceptable diet (apart from breast milk)			
i)	Breastfed children	466	48	10.3
ii)	Non Breastfed children	34	5	14.7
8	Consumption of iron-rich or iron-fortified foods (Proportion of children 6–23 months of age who receive an iron-rich food)	500	218	43.6
				Source: Survey Data

- Early initiation was highest for institutional deliveries (85%), followed by home deliveries (74%) and the private deliveries (56%). The rates exclusive breast feeding were equally good for both institutional and home delivers (>93% in both the cases) and low in deliveries which took place a private facility (73%).

5.1.4 Systems for delivering ICDS services with quality

- From the team of three members of mother support groups, AWWs were separately trained on service delivery component with special focus on survey, growth monitoring and plotting as stated. 100% AWW had maintained survey registers, out of which 70% had updated survey registers for the last survey and 90% had the list of target children and mothers. More than 90% AWWs were aware about correct growth plotting and its interpretation. 80% AWW were found to maintain the WHO growth register.

- The feedback from the district officials and Project team showed that monthly sector meeting of MSGs were very useful in assessing progress of this project and identifying villages where additional efforts were required. These meetings also provided a platform for refreshing MSGs knowledge on IYCF.

- The staff nurse at the health facility emerged as the most important source of counseling with almost 71% respondents confirming her role in counseling. The facilities were also observed to be weighing all children who were delivered at hospital.

5.2 Factors/Strategies contributing in project achievements

5.2.1 Training /Capacity building

- The placement of trained 48middle level trainers/counsellors including project co-ordinators within the district played an important role determining the quality of mother support groups. These counsellors trained for seven days using the integrated 3 in 1 training module acted as the resource pool of master trainers for 3858 MSG members. They not only trained the members of Mother Support Group but also ensured that knowledge levels and skills of MSGs were adequate to deliver quality counselling. The trained pool also provided advice on cases which could not be managed at the level of mother support groups.

- The three day training of 3858 members of Mother Support Group played an important role in educating the MSG members on key aspects of Infant and Young Child Feeding. The training empowered the members of MSGs to reach the caregivers of children under twos with good quality counselling and support in time of difficulty (sore nipples, breast engorgement, problems in milk let down, mastitis etc). Using appropriate tools like flip charts, utensils etc MSG also held demonstrations for complementary feeding.

- The respective Supervisors of AWW and ASHAs i.e. the ICDS Supervisors and MOICs were also oriented for a day on the counselling elements and the project strategy. The project also strengthened the platform of sector meetings in ICDS and created capacity of Supervisors on IYCF as well as other service delivery aspects. This allowed both the departments to be equally informed and aware on the roles of their departments and resulted in better ownership of the project.

- The strategy of reinforcing IYCF messages through trained staff at health facility was also instrumental in communities adopting correct behaviours.

5.2.2 Monitoring and Supervision of MSGs:

- The project started with 48 IYCF counselors whose main responsibility was to guide the mother support groups in acquiring skills and knowledge to function as effective counselors. During their visit these counselors not only assessed the functioning and working of MSG members but provided solutions for difficult cases encountered in the field. As the mother support groups became adept at handling field situations and addressing community problems, the numbers of counselors were brought down gradually as the monitoring of the functioning of MSGs was taken over by the ICDS supervisors. At the end of the project, a total of 10 IYCF counselors were in position. They were assigned villages where functioning of MSG was not satisfactory.

- Simultaneously the BFCHI team worked on creating model AWC where in addition to IYCF some service quality indicators were also included. Continued support was provided for two – three years by the BFCHI team to make the AWCs "model" centers. The responsibility of maintaining AWC as model centre was subsequently shifted to ICDS for monitoring and retaining the quality at the centers. By the end of the project, 764 model Aanganwadi centers were developed in 1124 villages which were working in areas with a functional AWC. The IYCF Counselors were assigned to monitor the non-graded AWC i.e. AWCs which were not model. This approach not only ensured sustainability but also helped the BFCHI team to direct its efforts where it was required the most.

- The centers where behaviors were not found to be improving or where services were not of the desired quality, joint visits were done by the BFCHI staff with DPO/CDPO/Supervisors. This approach was also crucial in shifting many centers from C to B category

5.2.3 Regular and joint review at sector, block and district level

- Every month a sector meeting was organised jointly by the BFCHI team and ICDS Sector Supervisor to cover 20-25 MSGs. The sector meetings provided an opportunity to discuss the project progress, reinforce key messages and address constraints faced by MSG members in the field. The Sector meetings which were initially started with the purpose of reviewing BFCHI project later helped in institutionalising the ICDS sector meetings and became a forum to discuss the performance of AWW.

- **Project Review Meetings -** Project Coordinator facilitated project review meetings with CDO, CMO, DPO, BFHI Counselors, Block Level Monitors, Block Officers (Health & ICDS) to discuss about the progress of the project activities and making changes to strategies, if needed, for the betterment of the project *(on separate day)*. The Project Coordinator attended monthly meetings called by CMO and DPO and present progress of project activities. These review meetings were later on integrated with the already existed ICDS monthly review meetings.

- **District level meetings -** District Level meetings for the review of the project were organized/ facilitated by Project coordinator with participation of District officials, UNICEF and BFCHI team members, Gorakhpur to discuss about the progress of the project activities and making strategies for the betterment of the project. These meetings were organized once in three months.

  The in-depth interviews from the district officials and Project team shows that monthly district and project review meetings with ICDS played an important role in reviewing the progress of project which was presented in every sector meeting using a predesigned checklist.

5.3 Project's strategy on addressing socially excluded communities

- The BFCHI project identified a total of 166 villages where due to the absence a formal service delivery structure from Health or ICDS, the access to health and ICDS services was very poor. These comprised of 99 villages inhabited by the Sehariya tribe of Madhya Pradesh, usually located outside the main village with a cluster of households living in extreme poverty. The remaining 66 villages were the Majras or hamlets which were excluded by virtue of not being part of the main village. The BFCHI team observed critical gaps in IYCF practices amongst these communities. Access to these communities was difficult as they were not open to people from outside and frequently travelled outside their identified place of residence in search of livelihood. After several visits and considerable negotiations with the families, BFCHI team was able to motivate some women to take up the task of improving the IYCF practices in their villages. The MSGs in these 162 villages included members from within the community. This approach increased the access of groups to families and made the task of influencing practices relatively easy.

- Recognising that women from Majras and Sehariya tribe may find it difficult to comprehend the training content due to lower education levels, the content of the module was simplified and restricted only to IYCF messages, problem solving and negotiating skills. There was more focus on practical solutions. The strategy helped in enabling and empowering the MSGs to function effectively as counselors

CHAPTER 6: Lessons learnt

- **Constant reinforcement is required for sustaining practices -** Improving Infant and Young Child Feeding behavior requires continuous reinforcement for sustenance. In Indian settings, breastfeeding is a norm and practice amongst majority. However, the deviation from the prescribed behavior is a common practice, with culture, traditions and breast complications all contributing to deviation.

  The project approach of reaching mothers through both community and facility based counselling was strategic in bringing breastfeeding closer to families. The frequent home visits and community meetings by MSGs reiterated the need and importance of practicing this behaviour. The reinforcement of breastfeeding messages at the health facility further ensured that the MSG members were not talking in isolation but that this behaviour is recognised and considered important by the doctors and nursing staff also.

- **Quality of counseling by the Mother support group determines the outcome -** The benefits of optimal Infant and Young Child Feeding behaviors are not easily perceived or recognized by the community. The change in practices requires time, negotiation and continuous dialogue. Creating peer counselors within the community is a recommended global strategy as very often the government frontline functionaries lack skills and is not able to give sufficient time required for behavior change.

  The positive findings of the project reveal that Mother Support Groups if selected and trained properly can provide timely need based quality counseling and practical support to mothers. The three day intensive training was accompanied by monthly meetings at village, sector and block levels for identifying field challenges and knowledge gaps and addressing the same. In case some mother support groups were found to be non-performing, the membership was changed to ensure that the quality was not compromised. The strong monitoring system also assured the quality of MSGs.

- **Mother support group- social recognition led to greater ownership -** The BFCHI initiative provided the mother support group members a platform for not only learning more about breastfeeding and complementary feeding but also equipped them with practical skills which contributed to successful breastfeeding in many cases where difficulty was encountered. The positive response from community empowered these members continue as agents of change in the community. The recognition retained the interest of these members and led to improved ownership of the project. The recognition was instrumental in maintaining the motivation and sustaining these groups over a period of six years. There was only 5% attrition in the MSG group which was mostly working in the field without any incentive.

- **Integration of IYCF in other ongoing maternal and child health programmes results in better convergence between ICDS and NRHM -** The mother support groups in BFCHI project comprised of functionaries from the two nodal departments looking after the mother-child dyad i.e., the AWW from ICDS and ASHAs from Health. As the project progressed, the scope of the work of MSG was expanded beyond the IYCF to include other aspects of child growth and survival especially for those

under twos. The latter included improving immunization and vitamin A coverage, promoting growth monitoring and providing counseling in antenatal period to improve birth outcomes. The convergence worked at all the levels- the village level, the block level and at district level as the project meetings and the progress reviewed were held jointly. Also the counseling was integrated within the ongoing opportunities existing within the system which made it easy for system to integrate and emphasize on the behavior. The latter included the monthly Village health and nutrition days, weekly Health and nutrition days at AWC, Comprehensive Child Survival Project/C-IMNCI, institutional deliveries as part of "Janani Suraksha Yojana", OPD visits at health facility, admissions in "Nutrition Rehabilitation Centers" and sick Newborn Care units etc.

- **Innovation is important for sustaining interest and achieving results -** The project scope was expanded beyond IYCF project during the last three phases. This strategy enabled both the AWW and ASHA to deliver not only counseling but other services also with quality. The promotion of IYCF linked to existing activities of AWW and ASHA like home visits and community meeting ensured that AWW and ASHA did not consider promotion of IYCF as an additional responsibility but part of routine task. That ICDS gained from other training is evident from the observation on improved records and reports at AWC.

- **Excluded communities can be reached through resources existing within the community -** One of the important innovations in the project was to create MSG in excluded communities of Sehariyas and Majras from within the community. The MSGs in excluded community delivered almost the same results as the other villages where system and its formal structure were in place. These findings show that in places where systems are absent or access poor, it is possible to elevate the role and status of volunteers and give them public praise and recognition, duties that earn them respect in the community, and adequate training, skills, and supervision.

- **Breastfeeding is more amenable to change than Complementary feeding -** The evaluation findings show that the project succeeded in changing the breastfeeding practices much more than the complementary feeding. In the complementary feeding too, while timely introduction and meal frequency could be increased, the project was not able to influence behaviors related to the dietary diversity and therefore minimum acceptable diet. The latter may be because improving complementary feeding requires addressing many complex underlying determinants of feeding behavior like family culture and traditions, poverty, literacy, food insecurity which are not easy to change by a team of three to four people.

- **Retaining members and keeping motivation levels high of MSG is challenging -** In absence of any remuneration the project team sometimes found it challenging to retain the motivation level of the group members especially the third woman. The project findings also show that while the knowledge levels of the third woman from the community was better than AWW or ASHAs, it was the AWW who was more engaged in counseling and visits as compared to the ASHAs and the third woman. The knowledge that both ASHA and AWW were receiving some kind of honorarium may be a contributory factor for the low participation. Mechanisms need to be put into place to motivate, compensate, and recognize community health workers and other volunteers that are engaged in such promotional activities.

- **Medical Colleges are a credible partner of choice -** The feedback from district officials shows that engaging Medical College gives credibility to the projects. Medical College with its pool of technical resource can be good advocates for this behavior.

- **System linkages important for project sustainability -** The BFCHI project aimed at strengthening not only the IYCF behavior but also strived to introduce counseling as a service in ICDS and Health system. The strategy involved creating capacities of both facility and community staff from Health and ICDS on IYCF and on selected components of service delivery. As a result, there was better upkeep of records and improved organization of community meetings.

  The project recognized the need of regular monitoring linked to routine monitoring done by the system. As the project progressed, the villages designated as “model village” were handed over to ICDS and the villages where more support was required by the team were only left with the project team. The evaluation findings reflect that even though the responsibility was passed to the ICDS and Health, the practices and behavior were continued by the families.

CHAPTER 7: Recommendations

- **Develop a State Plan of Action on Infant and Young Child Feeding -** The Lalitpur pilot shows that breastfeeding practices can be changed and sustained with support and participation from government systems and resources. However, focused efforts will be required to bring similar changes in state level indicators. A state plan of Action based on learning's from Lalitpur pilot and other successful initiatives needs to be drafted to provide guiding framework for IYCN activities in the state. The state Plan of action can propose phase wise scaling and promotion of IYCF practices linked to existing opportunities within health and ICDS. As recommended in the new operational guidelines of GOI on IYCF released in 2013, the state too can begin with high case load facilities like district hospitals and first referral units to promote early initiation and gradually move to strengthening exclusive breastfeeding through community opportunities of home visits, weekly take home ration days, community meetings etc.

- **Pilot mother support groups linked to Health and ICDS PIP -** The successful implementation of IYCF project in Lalitpur shows that good facility and community linkages are important for changing breastfeeding practices. The concept of mother support groups can be scaled up in select districts using system's platform and lessons learnt. It can be used for scaling up the strategy across the state as a whole. The second AWW in selected high burden districts of ICDS mission or the already existing "Matrasamiti" created at village level can be explored for identifying the third member in the MSG and for reaching excluded pockets.

- **Leveraging NRHM and ICDS funds -** The newly released ICDS Mission document and GOI IYCF operational guidelines indicate Government's commitment in improving this essential behavior. The ICDS mission recognizes counseling as a service and emphasizes on the need for IYCF promotion in the first two years of life. Good quality training, supervision and monitoring are critical factors for success and funds are required for the same. The budget needs to be built into the annual PIP s of NRHM and ICDS to ensure adequate funds for IYCF activities. The state may consider building in some incentive for the third women which would motivate her to work towards breastfeeding promotion.

- **More research in the area of complementary feeding -** Findings from the present study highlights the improved percentage of breastfeeding practices such as early initiation of breastfeeding within one hour without any pre-lacteals, exclusive breastfeeding for first six months, however the complementary feeding was found to be weak especially with regard to dietary diversity. Improving complementary feeding may require more rigorous research as complementary feeding is an important intervention for addressing stunting, the most prevalent form of under nutrition.

ANNEXURE

iKOnet
Intelligence connected

ANNEXURE 1: list of villages selected for evaluation

Selected Villages	Block name	Village Name	Village type
1	Madawara	Sarkhadi	ICDS
2		Gadanpur	ICDS
3		Dainpura	ICDS
4		Narahat	ICDS
5		Patna Mahdawara	ICDS
6		Rangaon	ICDS
7		Karitoran	ICDS
8		Girar	ICDS
9		Jalandhar	ICDS
10	Mehroni	Naiguwan	ICDS
11		Gaganiya	ICDS
12		Mahroni Rural	ICDS
13		Khiriyalatkanju	ICDS
14		Bangaruwa	ICDS
15		Sonjana	ICDS
16		Mainwar	ICDS
17		Saidpur	ICDS
18		Sadumal	ICDS
19		Luharra	ICDS
20	Birddha	Birari	ICDS
21		MailwaraKhurd	ICDS
22		Tor	ICDS
23		Khajuriya	ICDS
24		Birdha	ICDS
25		Bant	ICDS
26		MairtiKalan	ICDS
27		Jakhalon	ICDS
28		Dhorra	ICDS
29		NeemKhera	ICDS
30		PipariyaDongra	ICDS
31		Semara	ICDS
32	Bar	BamhoriKharait	ICDS
33		Bar	ICDS
34		Bahrawani	ICDS
35		Deoran	ICDS
36		Kailguwan	ICDS
37		Kailoni	ICDS
38		Billa	ICDS
39		Dangrana	ICDS
40		Banpur	ICDS

Selected Villages	Block name	Village Name	Village type
41	Jakhaura	Dhurwara	ICDS
42		Jamoramafi	ICDS
43		KalyanPura	ICDS
44		Ghisauli	ICDS
45		SankarwarKalan	ICDS
46		Mailar	ICDS
47		Thanwara	ICDS
48		Dailwara	ICDS
49		Andher	ICDS
50		SiwaniKhurd	ICDS
51		PathaGori	ICDS
52		Faujpura	ICDS
53		Dawni	ICDS
54	Talbehat	BanguwanKalan	ICDS
55		Sarkhandi	ICDS
56		Khandi	ICDS
57		KandhariKalan	ICDS
58		Churawani	ICDS
59		Sarsen	ICDS
60		Vidra	ICDS
61		Bijrotha	ICDS
62		Hansari	ICDS
63		RampuraKadwar	ICDS
64		Ward 11	ICDS
65	Lalitpur	Ward 3	ICDS
66		Ward 8	ICDS
67		Ward 11	ICDS
68		Ward 16	ICDS
69		Ward 19	ICDS
70		Ward 23	ICDS
71	Birdha	Barena	Majra
72	Madawara	Badgana	Majra
73		Chandaura	Majra
74		SemraKheda	Majra
75	Jakhaura	Badaura	Majra
76	Talbehat	Gulenda	Majra
77	Mehrauni	Chandra	Majra
78	Bar	Bar	Sariya
79	Talbehat	Karila	Sariya
80	Madawara	Rangav	Sariya
81	Jakhaura	Nanura	Sariya
82		Rajghat	Sariya
83	Birdha	Bandergudha	Sariya
84		Jakhalaun	Sariya
85		Bajarnggarh	Sariya

ANNEXURE 2: Cost Analysis Tables

Year	Trainings (Rs)	Sector level Meeting (Rs)	Field level Monitoring (Rs)	Project level Monitoring (Rs)	IEC (Rs)	Documentation (Rs)	Total
2006	26,30,000	72,400	-	6,37,600	-	-	33,40,000
2007	17,35,733	11,15,333	2,24,000	3,83,467	-	-	34,58,533
2008	14,21,000	12,19,200	19,39,200	5,44,800	75,000	60,000	52,59,200
2009	16,10,300	16,57,300	15,26,200	4,67,500	82,000	33,000	53,76,300
2010	6,95,293	19,07,375	11,51,600	4,73,500	71,875	36,000	43,35,643
2011	6,92,336	17,86,852	8,25,380	4,66,000	56,600	12,000	38,39,168
2012	2,17,940	15,62,240	8,44,300	5,24,000	1,58,000	35,000	33,41,480
Total	90,02,602	93,20,700	65,10,680	34,96,867	4,43,475	1,76,000	2,89,50,324
% distn.	31%	32%	22%	12%	2%	1%	100%