



Title: Feasibility of Strategies for Implementation of Care for Child Development

Background: Care for Child Development (CCD), is an evidence-based approach aimed at promoting early learning and responsive caregiving. The approach is integrated into existing services in sectors such as health, nutrition, education, and child protection. CCD focuses on guiding parents and caregivers on how to engage in play and communication activities that promote motor, cognitive-language, and social-emotional skills in young children. It also aims to strengthen responsive caregiving skills by coaching parents and caregivers to observe, interpret, and appropriately respond to their child's signals during play and interaction.

Scientific evidence shows that the ongoing interaction between genes, environment, and experience during the first 1000 days of life (from conception to 2 years old) plays a significant role in childhood development. This period is considered the best window of opportunity for maximum development, as it influences survival, physical growth, learning, and adult productivity. More than 80% of brain development occurs during the first 1000 days, and nurturing interventions during this period can have a significant impact on the child's development. The nurturing interventions should be matched with the programmed development of the brain, which starts from simple structures to more complicated cognitive functioning. However, many children do not reach their full potential due to inadequate nurturing and care.

Phase 1 (April 2011-October 2011)

Formative Research was carried out by SWACH in 10 villages to know the current practices of care givers and families for young children (0-3 years). A number of tools were used including village walks, social mapping, observation of care providers care givers and children, focused groups and administration of WHO UNICEF monitoring and evaluation guidelines.

The CCD package of WHO/UNICEF was adapted and used in several project sites in different countries. However, its effectiveness in India needed to be studied and established before recommending any scaling up. Therefore, the CCD project was implemented by SWACH Foundation in two different sites in Haryana and Maharashtra. The first phase of the project involved a formative research to conduct a situational analysis in 10 villages of Yamunanagar district, Haryana. The estimated population of the selected villages was around 10,500. Tools such as social mapping, village walks, observation studies, in-depth studies, and focused group discussions were used to assess various aspects of the project. The following domains were mapped:

I. Child and family domain:

- a. Household profile
- b. Profile of the care taker
- c. Profile of the child
- d. Knowledge, attitude and practices (KAP)
- e. Inventory of playing and learning material
- f. Inventory of child development activities (ICDA) before and after implementation of CCD
- g. Care taker report of provider skills (CROP) before and after implementation of CCD
- h. Assessment of mother and child in terms of feeding playing and for child development and communication (includes the guidance provided in MCP cards of Government of India)
- i. Immunization status.
- j. Feeding, playing communication and immunization included in MCP card were added by SWACH for assessment since these were not part of the WHO UNICEF tool.

II. Formal and informal community groups



III. Providers and facilities:

- a. Provider profile
- b. Facility checklist
- c. Perceived competence of providers (PCOP) before and after CCD training
- d. Care giver report of provider skills (CROP) before and after implementation of CCD
- e. Observation of provider's skills (OOPS) before and after implementation of CCD
- f. Facility checklist was not included in the WHO UNICEF monitoring and evaluation framework. So, facility checklist tool was developed by SWACH for M&E.

Activities done and findings:

A broad picture of the 10 villages selected was prepared through construction of village profiles. This information was supplemented by **social mapping**.

Social mapping was conducted in two villages, focusing on the well-to-do families and the poor families. The mapping was facilitated by field supervisors from SWACH and involved caregivers with children aged 0-3 years. The purpose of the social mapping was to gather information on early child development, child care, child feeding, and child health.

A total of 112 caregivers from poor families and 93 caregivers from affluent families participated in the social mapping sessions, with each session comprising of 10-12 caregivers. The prominent participants in both groups were mothers, grandmothers, and aunts of children aged 0-3 years.

In terms of child care, the main locations identified in both groups were home, neighbourhood, and sometimes the Anganwadi Centre for food supplements. As for child play, the locations identified varied between the two groups. Poor families mentioned home, neighbourhood, the Anganwadi Centre, as well as places of worship and gathering spots like temples, dharamshalas, baras, and kheras. Affluent families prioritized neighbours as the primary location for child play, followed by the Anganwadi Centre.

For feeding children, home was mentioned as the main location in both groups, followed by the Anganwadi Centre and the local grocery store for snacks. In case of feeding problems, the initial step was to throw chillies in the fire to remove any negative influence at home. This was followed by seeking support from traditional healers (JhadPhoonk) and later consulting registered medical practitioners (RMPs) in both groups.

In terms of immunizations, poor families mentioned the Anganwadi Centre, subcentres, and Primary Health Centres (PHCs) as the locations. Affluent families primarily identified the Anganwadi Centre, followed by PHCs.

For antenatal care, poor families mentioned subcentres and private doctors, including RMPs, and sometimes PHC Bilaspur. Affluent families considered PHCs as their top choice, followed by private clinics and subcentres.

In the case of serious childhood illnesses, poor families would take their children to RMPs or to PHC Bilaspur, or seek the services of a private child specialist in Bilaspur. Affluent families mainly opted for private doctors, both within and outside the village. The mentioned locations outside the village included Bilaspur, Jagadhri, and Pabni. Some government institutions, such as Bilaspur, Jagadhri, and Haibatpur were also mentioned.

Religious places, kheras, dharamshalas, near the village pond, and baras were identified as places for informal and formal get-togethers in poor families. In affluent families, neighbors were the most common



meeting place, followed by religious places catering to various religions and castes. Other locations identified included kheras, baras, chaupals, and dharamshalas. Only one group mentioned mapping the village Sarpanch's house.

The **household profile** of 60 families was assessed, with 33 families classified as poor and 27 families not classified as poor. Out of the poor families, 11 owned land between 1-3 acres, while 19 owned land exceeding 3 acres. In the non-poor families, 12 had additional sources of income other than agriculture, while 14 had non-agricultural sources of income. Among the poor families, none owned a car, only 2 had a motorcycle, and 20 had bicycles. In the non-poor families, there were 4 cars, 20 motorcycles, 11 tractors, and all had bicycles. While over 80% of non-poor families owned cattle, only 54% of poor families owned cattle. Non-poor families had better housing conditions, with 23 having pucca houses compared to only 8 poor families. Non-poor families had access to amenities like TV, cable connection, refrigerator, and air conditioner, while most poor families lacked these facilities. Alcohol consumption was higher among poor families compared to non-poor families. Family violence was reported in 2 non-poor families and 6 poor families.

Child profile: The study found that in 20 families, the child was the oldest among siblings, while in 30 families, the child was the second oldest. 19 children did not regularly attend the Anganwadi center, and 4 caregivers would send their children to neighbors for some time. One child was sent to a private playway school. The children who did visit the Anganwadi center would receive food supplements and occasional weighing, but they did not spend time playing or learning there. 36 children stayed at home. In 29 cases, there was a small age gap between siblings. None of the families had a mother child protection card. 45 children appeared healthy to the field staff.

In terms of **knowledge, attitudes, and practices**, 20% of caregivers always responded to a child's insistence, and an additional 6% partly met their demands, while the rest expected children to behave. It was found that 10% of caregivers spent less than 1 hour playing with the child, 25% spent 1-3 hours, and 65% spent more than 3 hours. 33% of caregivers tried to answer all the child's questions, and 6% partly answered them.

Regarding **feeding**, caregivers had limited understanding of exclusive breastfeeding, with some believing that complimentary foods should be given before 6 months or after 1 year. Most caregivers believed that complimentary foods should be introduced between 6-12 months, and opinions on when to provide supplementary foods from the Anganwadi center varied between before and after 1 year. Only half of the caregivers thought regular weighing of the child was important.

Handwashing practices were better for children than for caregivers. About 20% of caregivers washed children's hands less than 5 times a day, while 80% washed them more than 5 times. Knowledge of how to dispose of a child's stool was inappropriate in 95% of cases.

When it came to **child health-related issues**, one-third of caregivers recommended delivering the child in a government institution, 40% preferred a private provider, and 25% considered home delivery the best option. For sick children, 75% of caregivers would go to a neighboring private doctor, while 25% preferred a government facility or a qualified child specialist. Private doctors and nursing homes were the preferred choice for serious illnesses (66%).

Some families had playing and learning materials for children, but they did not give them to the children. Caregivers kept these materials at a safe place in their homes.



The study asked caregivers about their most recent **interaction with a care provider** at home or in a facility. However, even after extending the recall period to three months, very few interactions were reported. Surprisingly, 14 families reported that they had not been visited or had any one-to-one interactions in the preceding three months.

Assessment of children:

The study measured the body weights of 60 children and found that 67% were normal, 15% were undernourished, and 18% were severely undernourished. The proportion of undernourished children was higher in the 2-3-year age group. The high proportion of undernutrition in children below 6 months was mainly due to low birth weight. The study also found that the majority of children were breastfed, but not exclusively as defined by WHO. The findings may be influenced by selection bias, as the majority of children were from a poor community with higher rates of malnutrition.

In terms of child care, it was found that mothers and caregivers interacted with and provided opportunities for their children to see, hear, and feel. Many children showed responsiveness through smiling, tracking objects, and reaching for objects. The initiation of breastfeeding was delayed in many cases, and all babies were breastfed frequently at night.

For children aged 7-12 months, they were given clean and safe objects and toys to play with. Caregivers played games such as peekaboo with the children. Most children were able to sit and wave in response to others, and some were able to say simple words. Weaning with complementary foods was initiated at different ages, with the majority being fed 3-5 times per day. The indications of hunger were recognized by caregivers, and breastfeeding continued in addition to complementary foods.

Children aged 1-2 years were provided with play materials and objects to play with. They were able to express their wants and needs and imitate household work done by elders. Variety of foods were administered, and most children were fed under supervision. Bathing and clothing practices varied based on the season.

For children aged 2-3 years, caregivers actively engaged in teaching and encouraging learning. Children were able to point to body parts, eat by themselves, and name objects. Family practices in terms of feeding, bathing, and clothing also varied based on the season.

The immunization program was performing well, with high levels of awareness among caregivers and regular organization of immunization sessions. Monitoring and review of immunizations were part of the system, and ASHAs played a crucial role in promoting immunizations.

Observational studies were conducted by a team to observe child and caregiver interactions, with notes taken every five minutes. The study captured different aspects of child development and household practices through photographs and video recordings.

Direct observations were conducted on 56 out of 60 children in 10 villages. During the observation period of four and a half hours, caregivers attended to the children by playing with them, interacting with them, and taking care of their needs. Mothers were the primary caregivers for most of the children, followed by grandmothers. Males also participated in caregiving in some cases. It was found that children under the age of one received the most attention, while those between 2-3 years were sometimes left alone. The caregivers spent the most time playing with and stimulating the children, followed by child care, feeding, and child health activities. The caregivers also engaged in proactive interactions with the children, and various health-related activities were undertaken by the mothers. The quality of interactions and care provided was assessed as good, average, or poor based on pre-determined criteria. Child health related activities were not undertaken on all children during the period of observation.

Components assessed for quality	Good	Average	Poor
---------------------------------	------	---------	------



Child development	25	23	8
Child care	33	11	12
Child feeding	24	18	14
Child health*	11	14	4

During the observation period, it was found that younger children slept more than children above 6 months old. A total of 31.5 hours of sleep was recorded. Toys were used during the observation in 41 children, with a total of 259 contacts with toys or play material. The majority of contacts were with market toys (146 times), followed by improvised or non-toy objects/materials at home (113 times). Out of all contacts, 24 were considered harmful for the child, although the caregivers were not aware of the danger. There was no observation of toy or play material contact outside of the home. In Anganwadi centers, the use of play material for children below 3 years old was uncommon due to a lack of orientation towards early child development. One-to-one interaction was not observed at the centers. There was no evidence of child beating during the observation, but instances of anger, frustration, and disappointment were witnessed in 28 children on 55 occasions. The attempts to discipline the child were made 59 times in 34 children, with greater frequency in children above 2 years old.

The **qualitative assessment** focused on assessing the facilities and providers in 10 selected villages. Questionnaires were adapted from the WHO UNICEF Monitoring and Evaluation Framework and translated into Hindi. Observations were conducted in Anganwadi Centres and subcentres, with one staff member observing and another recording the observations. The assessment found that play communication, stimulation, and child health care were of poor or average quality in a significant number of children. Breastfeeding and complementary feeding practices were also found to be inadequate. The observations also revealed issues such as late arrivals, workers not reporting for duty, and ineffective use of time. Home visits by AWWs were not conducted as scheduled. Immunization sessions were not utilized to provide advice or counsel on child care. Focus groups with mothers and caregivers revealed that most of them primarily visited Anganwadi centres to collect ration and were not aware of government policies. There were also caste-related issues and misconceptions about Anganwadi centres. The study identified gaps in child care and suggested involving existing providers as well as voluntary and informal groups to fill these gaps. The WHO/UNICEF CCD package, including various guides and training materials, was adapted for use in the study. The project was supported by WHO and Intervida.

Phase 2 (December 2011- June 2011)

In the **second phase** of the project, implementation strategies for Early Childhood Care and Development (CCD) were tested in 10 villages in Haryana with the following objectives:

- To determine the feasibility of implementation strategy for CCD (birth upto 3 years age) through various delivery channels; ICDS, health sector, non formal networks and other channels for community mobilization and family participation consistent with national policy and strategy.
- To determine different strategies and delivery channels for improving family, community participation and support to enhance care for child development as a continuum of life course and delivery channels.
- To develop linkages between health, nutrition providers and other stakeholders at the community level to support care for child development.

Implementation strategies for Early Childhood Care and Development (CCD) were tested in 10 villages in Haryana, from PHC Bilaspur and Haibatpur PHCs of district Yamunanagar in Haryana, covering a



population of 10376. The strategies included regular communication with target families, forming Mothers' clubs/parenting groups, encouraging visits to Anganwaricenters, and extending home visits to promote CCD. Assessment was done to evaluate caregivers and children ages 0-3. Mother Child Protection Cards were distributed to pregnant women and mothers of children up to 2 ½ years. Counselling on nutrition and child development was also provided. Risk factors were compared between undernourished and well-nourished children. Advocacy and training workshops were conducted, and field visits and monthly weighing were used to identify undernourished children. Individual counselling and text messaging were used to address specific problems, and general text messages were sent to all caregivers. Mother's clubs were formed to focus on care for pregnant women and children under 3 years of age. The assessment process and findings were discussed, and the project package was revised based on expert recommendations and the WHO package on CCD.

Text Messaging (General Messages):

Text messages were sent daily to caregivers of children below 3 years, pregnant women, and various stakeholders. A line listing of the target population was created, and MCP cards were distributed to each beneficiary. Messages were prepared in English script with a mixture of Hindi and English, incorporating locally used words. The first message was sent on January 16, 2012, and a total of 156 messages were sent daily until June 20, 2012. A total of 95628 messages were sent during this period.

Mothers club: In 10 villages, 28 mothers' clubs were formed to focus on the day-to-day care of pregnant women and children under 3 years of age. Each club comprised 10-15 like-minded women who met at least once a week. The clubs had a parenting guide, flip book, and toys for play material. The meetings aimed to promote happiness, good nutrition, and play for the children. Self-care and integrated care for child feeding, development, and illness were discussed. Mothers had MCP cards for continuum of care. During the weekly meetings, topics were facilitated by ASHA or AWW workers. After a 10-15-minute presentation and discussion, a consensus was reached on 2-3 take-home messages for the mothers to be implemented at home.

Key highlights of Phase 2 of the study:

- Assessment of caregivers and children under 3 included issuing MCP cards, explaining nutritional status and growth curves, and advocating for CCD at district and state levels. A comparison of risk factors revealed that undernourished children had higher rates of low birth weight, pregnancy, twins, alcoholism, family fights, depressed mothers, and illness in their families.
- Training workshops increased knowledge and skills of service providers on CCD, emphasizing the importance of stimulation, play, and communication in child development.
- Regular field visits identified undernourished children for individualized counselling and support. 1800 counselling sessions were conducted, and SMS messages were sent daily to reinforce the counselling.
- Individualized SMS messages were sent based on child-specific problems identified during counselling. These messages were linked to existing problems and used to reinforce previous counselling sessions. Messages covered both play and feeding.
- Communication processes were further reinforced through SMS summaries of counselling sessions, telephone conversations, and direct communication with mothers. Phone follow-ups were made for illness, and serial linked messages were sent for immediate implementation of solutions to common problems like pneumonia and diarrhoea. Pictures were sent to facilitate follow-up of children with visible problems.



- Initial experiences with individual messaging showed encouraging results, with an average of 15-20 telephone calls received daily from parents, and message read rates exceeding 80%. However, success in applying the messages was low.

Phase 3 A (August 2012- April 2013): Phase 3A was the scale up phase which was carried out with the objective to improve physical and mental development of young children (0-3 years age) through continuum of care by using the delivery channels in the rural community in Haryana with emphasis on empowerment of primary care givers.

In this phase, the intervention package for the promotion of CCD was expanded to an additional 30 villages making the coverage to 40 villages (about 40,000 populations).

The main activities carried out during this phase were:

- (a) Conducting base line survey of the households
- (b) training of the care providers
- (c) organization of voluntary mother's group meetings
- (d) organization of group sessions for mothers and children in AW centers,
- (e) educational messages on ECD and child care were shared on a daily basis with registered families and (f) a bench mark was established using the LQAS technique.

Electronic monitoring system was also initiated to complement community operations. The intervention package was extended to 30 more villages in Bilaspur, thereby covering 40 villages in total with a population of 41,181. The study involved 2 PHCs (Bilaspur and Haibatpur), 6 sub-centers, 60 Anganwadi workers, 42 ASHA workers, and 6 ICDS supervisors. The work in those villages was co-ordinated by the respective PHCs and Child development Project Officer.

Main activities conducted during phase 3 A:

Revision of the CCD package: A new WHO package on Child Care and Development (CCD) was introduced, focusing on play and communication, and it was decided to adapt the package to include other components such as feeding, prevention, and response to illness. The package was then used for further training of front-line providers in health and ICDS programs.

Survey of villages- establishment of a data base: The project staff conducted house-to-house visits to collect information on 302 pregnant mothers and 1817 children under 3 years of age. The included basic details like name, age, sex, mobile numbers, and weight. The data was entered in an excel spreadsheet. The Mother Child Protection Cards (MCPC) was distributed to all the beneficiaries, obtained from the health department of the Haryana government.

Lot Quality Assurance Sampling (LQAS) Survey: LQAS-1 was conducted before scale up phase 3 of project. The survey aimed to capture risk factors for child development, child-primary care giver interaction, and maternal depression. This baseline survey was conducted in three primary health centres in Yamunanagar district. The primary care givers of children were interviewed in four age groups i.e., 0-5 months, 6-11 months, 12-23 months, and 24-35 months.

Four schedules were developed and translated into local language by a panel of experts. The surveyors and supervisors were trained, and interviews were conducted in pairs ensuring quality checks by supervisors.

Main findings of the LQAS-1 survey:

- The mother was the primary caregiver in almost all families (99%).



- 26.8% of the families were below the poverty line.
- Among literate mothers (90%), 45.3% were educated up to 10th grade or above.
- Most caregivers were between 18-29 years of age (86.8%) and didn't work outside the home (95.3%).
- 14.8% of the fathers consumed alcohol, and 11.3% of those who drank engaged in violent behaviour.
- 21.9% of primary caregivers showed all four measured expressions of love and affection to the child.
- None practiced all six activities to promote child learning through play.
- The 67% of negative practices for modifying child behaviour occurred in the 24-35 months age group.
- 10% of the caregivers considered feeding the child a problem.
- 2% of the caregivers left their children alone or under the care of a child less than 10 years old.
- 57.5% of the families reported their children being sick enough to visit a healthcare provider in the last month.
- 28.4% of children were undernourished as per WHO growth standards.
- 19.5% of primary caregivers had visited the Anganwadi centre more than three times in the last week.
- 20.8% of primary caregivers had maternal depression (SRQ score of 10 or more).
- Socioeconomic conditions, education, age, burden of care, alcohol consumption by the husband, and pregnancy affected the SRQ score.

Training of the care providers:

The care providers were trained on child care and development (CCD) using the WHO adapted training package by the SWACH faculty. The training aimed to enhance their knowledge and skills in stimulating, playing, and communicating with children to promote their brain development. The package included a participant manual, counselling cards, training videos, a parenting guide, and a supervisor guide. Hands-on practice in the community helped build their confidence and sharpen their skills. Regular follow-up trainings were also conducted monthly by SWACH staff to reinforce the knowledge and skills of care providers and their supervisors on child care.

Table: Service providers trained

Type of provider	Number
Supervisor (Health)	16
Supervisors (ICDS)	5
AWWs	60
ASHA	42
Mothers Club Leaders	27
Total	150
No of Batches (Supervisors + Frontline workers and Volunteers)	6
No of Batches for Supervisors	1

Reaching out to families to promote CCD:

Broadly 3 delivery channels were used to reach out to the families to promote CCD interventions.



Short Message Service (SMS): Simple and short text messages were sent daily to families of caregivers with children under 3, pregnant women, frontline care providers, doctors, and other stakeholders. Over 90% of the target population owned mobile phones. Messages were sent in a mixture of Hindi and English words that were commonly spoken and easily understood. The first message was sent on December 16, 2012, and messages were sent daily except for interruptions caused by network problems. The number of beneficiaries increased following the registration of pregnant women and children under 3 in all 40 villages. In December 2012, messages were sent to 830 families with children aged 0-3 years and pregnant women. This increased to 1500 families by April 15, 2013.

A total of 139,264 messages were sent during the period from 15th December, 2012 to 15th April, 2013. There was a decline in the number of messages sent during the period 15th February to 15th March due to internet problems.

Mothers club: A voluntary group of pregnant women or women with children under 3 years old, met once a week at a convenient location. Each club chose its name and elected a leader based on interest, education, and communication skills. Possessing a mobile phone was mandatory for the leader to facilitate communication. Flip Book, Parenting Guide, and Play Kits were provided to the clubs. Weekly handouts were also supplied for discussion on core topics. In case of unresolved problems, SWACH was contacted. Report of each meeting communicated to SWACH via SMS. Play kits were also supplied by SWACH to these clubs. The play kit catered to the needs of children of all age bands.

Contents of the play kit:

Age Band (in months)	Play Material
0-3	Rattle
3-6	Sponge
6-9	Ball
9-12	Colours & shapes
12-24	Puzzle, bottle & Clips, Clay
24-36	Slate with Beads, material for stacking, Picture Books, crayons and papers

A total of 38 mother's clubs were formed in 31 villages. These groups were facilitated by ASHA workers or AWW. The major topics of discussion were playing, feeding, communication, sensitivity, parent's health, newborn care, diarrhea prevention, crying, ARI, weighing children, parent's role in child development, pregnancy care, and birth preparedness.



Image: A mothers club in action



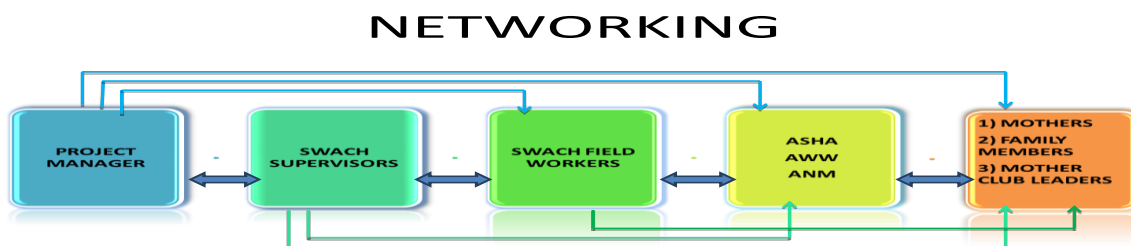
Group Sessions in Anganwadi Centre: Group sessions were started for pregnant women and for women with children under 3 years of age. These sessions provided a platform for women to share their problems, get solutions, and learn from each other. Children also benefited from playing together and learning from each other under supervision. The number of children attending these sessions increased over time. ASHA, AW helper, and members of mother’s clubs were instrumental in mobilizing women to attend the sessions.

A total of 7495 children, 0-3 years of age attended AWC (22.7% were undernourished). Regular weight check-up of children showed that there was a substantial reduction in under-nutrition i.e., from 25.9% to 15.8%.

Monitoring and reporting:

A monitoring system involving pregnancy, childbirth, death, monthly weight, home visits, mother's club meetings, Anganwadi center group meetings, and concerns or illness was set up. Reports were sent via SMS or phone call and collected by mother's club leaders, ASHAs, AWWs, and field staff. This information was then sent to supervisors and the manager at SWACH for data entry and feedback. The reporting system was designed to improve reporting, strengthen quality through ongoing review, and enhance communication with families. A phone number was provided to families for direct communication regarding concerns or illnesses. Networking through phone calls and SMS enabled supportive supervision and feedback among providers at different delivery channels, creating a two-way communication system that linked stakeholders.

Networking channel established between providers and families during the study:



Incoming and outgoing messages: During the reporting period, 25,500 incoming messages were exchanged between families, ASHAs, AWWs, Mother’s club leaders, SWACH field workers, SWACH supervisory staff and the program manager, while 23,000 outgoing messages were exchanged between families, ASHAs, AWWs, Mother’s club leaders, SWACH field workers, SWACH supervisory staff and program manager.



Incoming and outgoing calls: There were 8600 incoming calls reported during the period of 4 months. Project manager received 700 calls, SWACH supervisors received 2400 calls, field workers received 4000 calls and ASHA/ AWW/ MC Leaders received 1500 calls. A total of 10,300 calls were made during the reporting period. The number of outgoing calls exceeds the incoming calls. Project manager made 2400 calls, SWACH supervisors made 3900 calls, field workers made 3000 calls and ASHA/ AWW/ MC Leaders made 1000 calls. Maximum numbers of calls were made by SWACH supervisors.

Nutritional status: Mother Child Protection Card (MCPC) was given to pregnant mothers and children up to 3 years of age. This instilled a sense of pride and ownership among the households. The ASHA and Anganwari Workers (AWW), with the assistance of project staff, recorded the children's weight in the MCPC on a monthly basis. The mothers were informed about the nutritional status of their children using a color-coded system (green for normal, yellow for -2z, and brown for -3z), and they were given advice on appropriate feeding and development practices.

An anganwadi worker weighing a child:



A total of 1637 children were weighed in 40 villages and plotted on the MCP card. Analysis of nutritional status based on weight for age revealed that 74.1% of children were having normal weight, 18.8% fell in -2Z and 7% fell in -3Z. Thus, 25.8% of children were underweight. The follow-up weight of the children taken in March, 2013 clearly indicated that overall under nutrition was reduced. This was considered as a success of the package of CCD interventions.

Vital events: Other vital events were also observed during the research. During the reporting period a total of 226 child births were reported, out of which 205 were live births, 19 were abortions, 2 were still births, 3 were deaths in children below 1 month of age. The live births included 110 males and 95 females. 78% of the births were via normal deliveries and 22% were via C-sections. 32% babies were breastfed within 1 hour of birth and 68% started breastfeeding after 1 hours. 20% births were in low birth weight category.

The home visits mainly by ASHAs and SWACH field workers to counsel the families on feeding, play, and communication. Visits were done at least 5 times during 0-42 days age and monthly between 6-12 months age

Continuous Quality Assessment and Improvement (CQAI): CQAI was used to monitor the project.

Three tools were developed for assessment of:

1. Observation of Anganwadi Group Session



2. Observation of Mother's club meeting

3. Self-assessment by the mother/caregiver relating to services sought or received.

Assessment was done by SWACH field staff for 2 months (15th February 2013 to 15th April 2013).

Conclusions:

- LQAS helped to identify strengths and weaknesses of child development care at households, establish intervention effects, risk factors, and service usage data in 40 villages.
- WHO-UNICEF tools were used to train the care providers. Delivery channels like AWW group meetings, mother's clubs, phone communication, and follow-ups were utilized.
- Registration of beneficiaries, birth and death tracking, and progress monitoring via phone and SMS were implemented, resulting in network formation and regular feedback to providers.
- Three tools for quality assessment were developed: AW group session observation, mother's club meeting observation, and self-assessment by caregivers.
- Nutritional status benchmarks were established, and improvements were noted based on phase 2 and 3 experiences.
- SMS and phone, combined with follow-ups, helped gather information about sickness burden and perceptions; unnecessary medicine use could be reduced to control out-of-pocket expenses.

Phase 3B was conducted during 1st June, 2013 to 31st December, 2013. During this phase, the implementation of CCD interventions was extended to 60 additional villages covering a population of 60,712. So, total population covered in this phase was 101,893 from 100 villages. In the 60 villages taken up, there were 88 Anganwadi Centres and 61 ASHA workers.

The main objectives of the study were:

- To undertake the operational feasibility of key CCD components.
- To develop the capacity of care providers (Health and ICDS functionaries).
- To strengthen the existing Monitoring and Supervisory mechanism by promoting Quality
- To promote CCD approach through community mobilization.

Major activities during phase 3B:

Training of providers and supervisors: Three batches of 3-day training sessions were conducted for healthcare providers and ICDS workers. The training was facilitated by SWACH. An adapted CCD training package including participant manuals, counselling cards, training videos, parenting guides, and a flip book was used. Hands-on training was provided on mother-child pairs, focusing on different age bands. Two days of additional training was organized for supervisors to enhance their supervisory skills. Follow-up trainings were conducted regularly on a monthly basis to reinforce the knowledge and skills of care providers. The training covered more than 80% of the targeted care providers.

Type of provider	Number
Supervisor (Health)	16
Supervisors (ICDS)	6



AWWs	88
ASHA	62
Total	172
No of Batches (Supervisors + Frontline workers)	6
No of Batches for Supervisors	1

Table: Service providers (Health and Women and Child Development) trained

Implementations to promote CCD across delivery channels:

Broadly 3 delivery channels that were utilized during the previous phases to reach out to the families to promote CCD interventions were used in this phase as well.

Short Message Service (SMS) supported by phone calls:

Messages were sent to families with children aged 0-3 and pregnant women between June and December 2013, to empower them in self-care. The number of families receiving messages increased from 1530 in June to 3619 by December. A total of 419,486 messages were sent during this period. The main focus of the messages was on play and communication, with many messages integrating other topics such as feeding, prevention of illness, and response to illness. Out of 158 messages sent during this period, 96 (60.8%) focused on play and communication, 18 (11.4%) on feeding, 30 (19%) on prevention of illnesses, 8 (5.1%) on pregnancy, and 6 (3.8%) on response to illness.

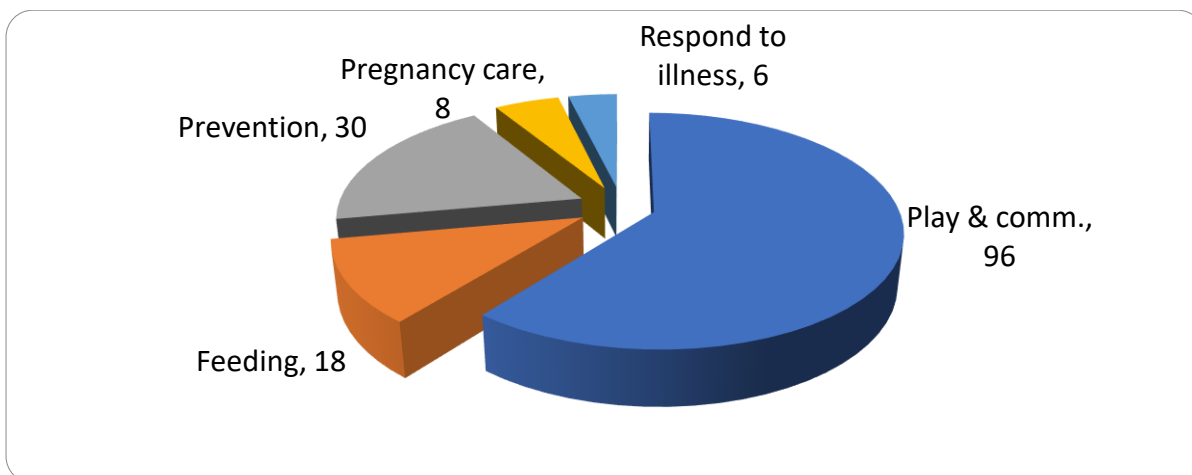


Figure: Components of the "message of the day"



Mothers club: 97 mothers clubs were formed in 100 villages. In June, there were 45 mother's clubs in 40 villages with 160 meetings held. Club formation and meetings began in 60 new villages from June onwards. In December, 315 meetings were held, representing an attendance rate of 81.2%. Decreased meeting attendance in November and December was probably due to festivals, marriages, and cold weather.

Anganwadi Group Sessions (children 0-3 years age): Upon addition of 60 new villages, number of Anganwadi centres increased from 61 to 153. Attendance of children up to 3 years of age increased also from 13,358 in June to 30,134 in December. A total of 1,87,936 children attended AWC during this phase of the project. The proportion of underweight children (-2z and -3z) attending AWC increased from 22.6% in June to 27.3% in December. Greater emphasis was given on mobilizing poor, sick, and underweight children.

Nutritional status: During the baseline survey, 2643 children were weighed and plotted on the Mother Child Protection (MCP) Card. The nutritional status of children was comparable in all baseline evaluations. Seasonal variations in weight were observed, with a decline in under nutrition during the winter months and a rise during the summer months. The nutritional status improved during subsequent summer and winter months, and the frequency of occurrence of under nutrition was blunted during the summer season.

Vital events

- i. As on 31st December a total of 2291 child births were reported. There were 2125 live births, 112 abortions and 54 still births. Amongst the live born babies there were 1149 males (54.1%) and 976 (45.9%) were females.
- i. Preference for place of delivery was - 40.5% at DH/ SDH, 19.7% at CHC, 6.7% at PHC. 1.1% at Govt. facilities, 28% Private and 4.1% at home.
- ii. The delivery was normal in 78.3% while C-section was done in 21.7%.
- iii. First breast feeding within one hour was done in 59.1% babies while 40.9% were fed after one hour of birth.
- iv. The incidence of low birth weight was 22%.

There were 42 neonatal deaths (neonatal mortality rate of 19.8/1000 live births) which is 7.2 points below state average. This has been possible through continuum of care and a focus on home based postnatal care. In contrast to the reduction in neonatal mortality rate there has been no decline in the perinatal mortality rate.

Home visits: Home visits focused on newborn care due to high mortality and a government program. ASHAs and field workers made home visits to children during specific intervals. Each field worker visited six homes per working day, while ASHAs were asked to visit at least one child over one month of age daily. Sometimes, the home visits were skipped by ASHAs due to training commitments and tiredness after training, despite the potential for reinforcement of acquired knowledge and skills.

Use of mobile phones: The main application of phones in the project was the use of SMS feature as well as the phone calls. During June-December 2013, 25,500 outgoing SMS messages were exchanged between families, ASHAs, AWWs, Mother's club leaders, SWACH field workers, and supervisory staff. Also, 26,500 incoming calls and 46000 outgoing calls were made during this period. The number of outgoing calls exceeded the number of the incoming calls.

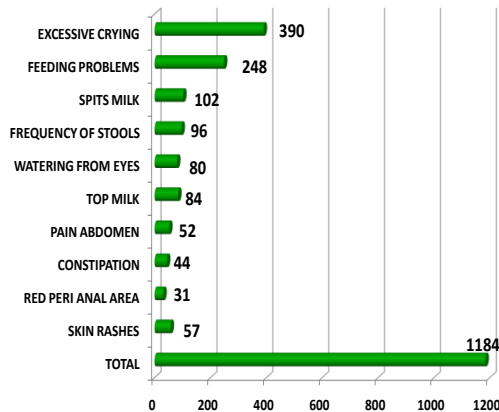
There were several constraints in the application of SMS, phone, and computer, including lack of appropriate equipment, literacy, and language barriers. Efforts were also made to contact families via SMS to educate them about birth preparedness and postnatal care for the mother and newborn baby. Phone



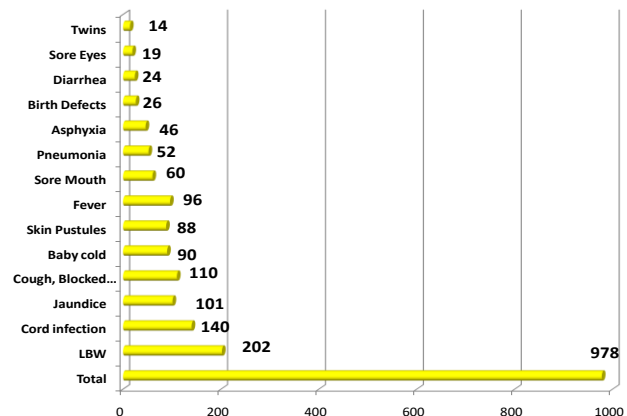
conversations with ASHAs (Accredited Social Health Activists) were recorded using a phone recording system and transferred daily to a computer.

Concerns in the newborns:

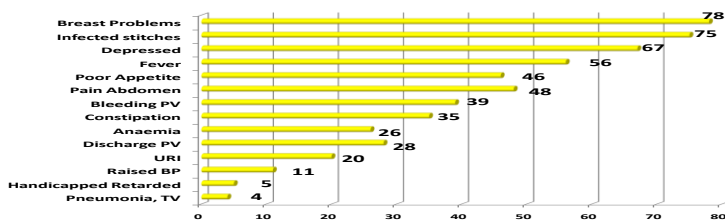
Concerns in Newborns



Problems and illness in Newborn babies



Problems in the mother:



Observation of Anganwadi Group Session: Analysis of observation showed that, there was a great scope for improvement in the following areas:

- Reading SMS as health messages during the group sessions
- Children playing with toys or household objects
- MCP card of child not used for discussion of problems and issues
- Engagement of AWW in the group discussions.

Deficiencies identified in the mother's club meetings:

- SMS not read
- Use of learning materials like Flip book and Parenting Guide not used and
- Questions and concerns not identified and discussed.

(3) Observation of Provider – Client interaction during home visit: The capacity and quality of counseling skills of the providers were assessed during their interaction with the client at the time of home visit. Observation check list given in the WHO CCD package, 2012 was adapted and used. The checklist was divided into four sections.



i. **General principles of Communication** --- It included six questions covering greetings, showing gestures, asking questions, use of material to explain to the client, etc. Out of six questions use of four or more correctly was classified as good.

ii. **Assessment of mother's capacity on CCD** --- It included four questions and was covering areas like how the mother plays, talks and make the child smile. How the mother used to teach the child to learn new thing was also included. Out of four correct use of two or more was considered as good.

iii. **Counselling the mother** – It included five questions and covering the use of counselling card to explain the mother how to play and talk with the child and praising the mother for the good work that she is doing. Out of five if three or more are done the skill is assessed as good.

iv. **Planning and Problem Solving** – This section had four questions which included reaching an agreement and planning for implementation of the CCD activity agreed upon, and solving problem of the mother in implementing the same.

Lots Quality Assurance Survey (LQAS-2)

LQAS was implemented in 3 Primary Health Centers in Haryana (Bilaspur, Mugalwali and Haibatpur of Bilaspur block in Yamuna Nagar district) in Haryana on a population of 113,673 in December, 2013. The survey conducted in December, 2012 was taken as the baseline for phase 3B of the study in December, 2013. 31 villages were included in phase 3A, while the number of villages included in phase 3B were 32. Primary care givers of children in the following age bands were interviewed:

- i. 0-5 months
- ii. 6-11 months
- iii. 12-23 months
- iv. 24-35 months.

The survey aimed to support primary care givers and family members and assess various aspects related to child development, including risk factors, primary care giver interaction, and maternal depression.

Four questionnaires were developed and translated into local language (Hindi) by panel of experts in June, 2012 at SWACH Foundation, Panchkula. Training of the surveyors and supervisors was done and the survey was conducted by interviewers in pairs, the quality was checked by the supervisors.

Main Findings:

1. The socio-demographic characteristics of the population were comparable for both the surveys.

2. Child-Primary Care Giver Interaction:

a. **Practices for expressing love/affection** to the child in the last 24 hours were observed. In 2012, only 21.9% of primary caregivers showed all four behaviors of expressing love and affection to children. This included kissing, stroking, hugging, looking directly in the child's eyes, saying kind words, and smiling at the child. However, in 2013, this number increased significantly to 87.5%. This indicates a positive trend in the expression of love and affection towards children by primary caregivers.

b. **Practices for promotion of child learning through play:** The following six behaviours were studied:

- primary care givers encouraged the child by copying or mimicking the child;
- gave some toys to the child;
- played with the child;



- went outside home with the child;
- spent time naming, counting or drawing with the child;
- helped the child to learn something new.

In 2012, none of the primary caregivers performed all six activities to encourage learning in their younger children, while in 2013, 22.5% of primary caregivers performed all six activities. The proportion of mothers who performed 5 out of 6 activities also increased between 2012 and 2013.

c. Practices for promotion of child learning through communication in the last 24 hours: Four practices were included in this category:

- talked directly to the child
- said kind words to the child,
- talked with the child while doing household chores and
- sung a song to the child.

From 2012 to 2013, there was an increase in the proportion of primary caregivers who practiced all four communication activities with their children, from 0% to 29%, indicating an improvement in communication. Mothers were more likely to communicate with their children in 2013, than in 2012.

d. Ways of behaviour modification used by the family members in last one week:

Mothers used positive behaviour modification activities like offering choices, explaining reasons, and praising good behaviour. In 2012, mothers did not give children alternative options, but this changed in 2013. Positive behaviour modification activities increased in 2013.

e. Negative or Harsh Behavior:

Negative practices for behaviour promotion were reported among 24 %, 53%, 59% and 67% respectively for the age-groups 0-5 months, 6-11 months, 12-23 months and 24-36 months (LQAS-2).

f. Other Practices Related to Sensitivity and Responsiveness by the primary caregiver: Responsiveness to a child's sadness or crying improved in 2013 compared to 2012, with caregivers providing toys or food to soothe the child.

g. Other behaviours of primary care givers: In 2013, a higher proportion of children with feeding problems and children left unattended by adults compared to the 2012 LQAS. Additionally, more families in 2013 left children alone or under the care of young children compared to 2012. The number of unattended children increased with age.

h. Health Seeking Behaviors of primary caregivers: Care seeking for illnesses demonstrated a shift towards more rational practices in 2013, with increased utilization of private hospitals and consultations with the SWACH helpline.

i. Care seeking for illnesses: In 2012, most primary care givers (83.9%) used local unqualified doctors, while in 2013, there was a more rational approach to care-seeking, with a decline in the use of unqualified village-based practitioners (35.8%) and an increase in the utilization of private hospitals (30.8%). There was also significant consultation with SWACH (26.5%) for illness management.

3. Maternal Depression: There was a considerable decline in the proportion of women who were depressed in 2013 compared to 2012.



4. Nutrition Status of children: There was a significant improvement in the nutritional status of children between LQAS-1 and LQAS-2 surveys. The prevalence of undernutrition declined from 12.6% to 5% for children falling below -3SD, and from 28.4% to 18.75% for children falling below -2SD.

5. Services related to care for child development for primary care givers of children 0-3 years:

There was a substantial increase in the utilization of services related to physical growth and care for child development.

- Primary caregivers' access and utilization of services related to physical growth and child development were assessed in two years.
- The proportion of families with health cards remarkably increased from 2.25% in 2012 to 84.5% in 2013.
- The recording of weight measurements improved, with 84.5% recorded once and a significant increase in recording weight more than once in 2013 compared to 2012.
- Knowledge of birth weight also increased by 15% in 2013.
- Voluntary mothers' club membership increased significantly from 3.75% in 2012 to 42.5% in 2013.
- Attendance at Anganwadi centers almost tripled in 2013.
- Health education through SMS increased substantially from 1.25% in 2012 to 72.5% in 2013

6. Knowledge of Care Givers:

- Care givers showed positive responses to questions on care for early childhood development, indicating a good understanding of key concepts.
- 32% of mothers felt their child's weight was alright, while 45% felt it was average and 16% considered their child to be weak.
- 28.9% of mothers could tell the child's weight just by looking at them, while others used the MCP card or sought guidance from Anganwadi workers.
- 42% of the mothers could correctly identify undernutrition by the child's color range on the MCP card.

7. Home Visits: Home visits by ASHA and SWACH field staff increased, along with participation in Anganwadi centers and voluntary mother's club meetings.

- 80% of women reported home visits by ASHA and SWACH field staff in the preceding month.
- 42.5% of women said that the ASHA read a text message about play, communication, feeding, or preventing or responding to illness.
- 42% of caregivers stated that there was discussion or demonstration of play and communication.
- 94.25% of caregivers thought that regular home visits by ASHAs would be very useful for their families.

8. Health Education Messages: Care givers (70%) reported receiving health education messages via SMS, with a good proportion reading and considering practicing the recommended behaviors.

9. Practices relating to ECD based on the knowledge of the family: 65% of the caregivers practiced early childhood development behaviour, 63.5% reported a change in their behaviour, while 39.5% reported a change in the behaviour of other family members.

10. Behavior Changes:



Behavioral changes related to feeding, play, communication, illness prevention, and appropriate response to illness were reported by a significant number of care givers

- 254 caregivers reported one or more behavioural changes.
- 306 total changes were reported, indicating multiple changes per caregiver.

Phase 3C included research on the feasibility of strategies for implementing care for child development was conducted from May to December 2014. The study covered 100 villages in the Bilaspur Community Development Block, Yamunanagar district, with a population of 108,951.

The research aimed:

- To sustain project implementation,
- To enhance the capacity of care providers and volunteers,
- To strengthen existing supervisory mechanisms for quality assessment and improvement,
- To determine the operational feasibility of key CCD components, and
- To promote the CCD approach through community mobilization.

Activities carried out during phase 3C:

SWACH staff continued to update the database with information from new pregnant women and children under 3 years of age. Refresher trainings were conducted for healthcare providers in June and July 2014. Monthly follow-up trainings were also conducted to reinforce the knowledge and skills of the care providers and their supervisors. The project staff visited the ASHA workers to provide support and training. Home visits were conducted regularly by ASHAs to counsel mothers and caregivers on child development, health promotion, and disease prevention. A total of 109,522 home visits were conducted during May-December 2014, with over 9,000 of them being supervised for quality assessment and support.

Implementation to promote CCD through different delivery channels:

Following feedback from participants, a strategy was developed to promote engagement between mothers and children through a "Topic of the Day". Key topics were identified and mothers, ASHAs, AWWs, and SWACH staff were trained on the strategy. The focus was on using simple materials and not requiring additional time or resources from the mother.

Methodology used:

- 40 topics were chosen to develop the capacity of care providers on CCD.
- A message of maximum 320 characters was developed for each topic and feedback was obtained from SWACH staff.
- The message was refined and sent to 328 care providers (152 Anganwari workers, 107 ASHAs, 10 field workers 6 supervisors and 45 mother club leaders) one day before its scheduled use.
- Care providers used the message in group meetings and home visits, ensuring consistency and coordination in all villages.
- Care providers provided feedback through messages to SWACH.
- The number of families and children exposed to the topic was assessed through feedback and home visits.
- One home visit on a discussion topic was counted as individual exposure.
- Analysis was conducted for 25 days across July and August 2014 and compared to 25 days of work in January and February 2014.



Development of guidelines for topic of the day: The 320-character messages on various topics were discussed by SWACH staff daily and two-page guidelines were developed for each age band (0-6 months, 6-12 months, 12-24 months, and 24-36 months). A 320-character message was sent to care providers (328), which was then summarized into a 160-character message and sent to families with children under 3 years old. This approach aimed to achieve synchronization between the topic of the day and the largest proportion of interactions during interpersonal communication and group work. The developed tool served as a useful guide for ASHAs and AWWs in their daily work, helping to enhance the growth and development of young children. Even on days with network issues, SMS on the topic of the day was sent to care providers to ensure continuity.

Short message service (SMS): During this period, the focus of message of the day was on play and communication. A synchronized strategy guided families and providers to enhance message practice. The total number of target audience registered for SMS was 4159. A total of 593,440 messages were sent from May to December 2014. There was an increase in the number of messages from May to September, but a decline in October and November due to network problems and the festival season.



Family reading message of the day

From January 2012 to December 2014, over 15 lakh SMS messages were sent to beneficiaries and service providers in a project area. Before July 2013, the volume of messages was low, but it increased after the project was expanded to 100 villages. This suggests a strong relationship between the project's scale and its impact on communication.

Mothers Clubs meetings (voluntary groups) to promote CCD: The Mothers Club was an innovation tried during phase 2 of the project and included voluntary group of women for the women and by the women in SWACH villages. The club leader had to have a mobile phone and be willing to work on a voluntary basis. Children used to play with materials provided by SWACH during meetings. In villages with a high proportion of poor people, an additional club was formed due to cultural reasons. 96 Mothers Clubs were functional until 2014. Club leaders remained active and were contacted by SWACH field staff. Supplies were replenished, and feedback was provided at the end of meetings.

Group Sessions in Anganwadi Centre:

Anganwadi session

Play objects made by mothers



SWACH field workers increased visits to care providers struggling with group sessions and reporting, providing mentorship to boost their confidence. The number of reports received per AWW per month gradually increased from May to September 2014, with a decrease during October and November due to festival season and marriages. Initially, women had to be called to the centre, but now over 70% attend voluntarily. The number of children aged 0-3 attending centres for supplementary feeding, monthly weighing, and play has risen steadily. Attendance peaked in September 2014 but declined during October and November due to festivals, marriages, and cold weather. Anganwadi centres closed for a week in December due to cold weather, leading to irregular reporting and exclusion of this month from the analysis.

Nutritional status of children: In November 2014, 4488 out of 4923 children were weighed and had their weight plotted on the MCP card. The importance of the child's growth was explained to all caregivers. In November 2014, 85% of children had normal weight, 12.7% were -2Z, and 2.3% were -3Z, indicating a decrease in underweight children compared to July 2013. A decrease in the prevalence of overall under nutrition persisted from May 2014 to November 2014. This demonstrated the effectiveness of the CCD intervention package in combating under nutrition.

Vital events:

- In 2014, 1502 pregnancies were reported with 1431 live births, 49 abortions and 22 still births. Of the live births, 52% were males and 48% were females.
- The preferred place of delivery was government facilities, followed by private facilities. Only 2 deliveries were done at home.
- The delivery was normal in 76% while C-section was done in 24%.
- 66% of babies were breastfed within an hour of birth, while 34% were fed after one hour.
- The incidence of low birth weight was 11%.
- There were 25 neonatal deaths, attributed to continuum of care and increased focus on home-based postnatal care by ASHAs.

Lots Quality Assurance Sampling (LQAS-3): LQAS-3 was conducted in 3 blocks: Bilaspur (intervention), Khizrabad (control I), and Mullana (control II). The survey was conducted in 50 villages in each block. MCP cards were used to guide caregivers on feeding, play, and communication. LQAS method was used for sampling design, with a sample size of 100 for each age group (0-5 months, 6-11 months, 12-23 months, and 24-35 months). Children were selected using simple random sampling. 20% of the children selected were from BPL families. If the parents of a selected child could not be contacted after three visits, the child was replaced with another child in the same age group.



A total of 1200 primary caregivers were interviewed, 400 in each area and 100 for each age band. Supervisors conducted repeat interviews for 5% of respondents for quality assurance on the same day as the original interview.

Findings of LQAS 3:

Section 1: Socio-demographic profile: Mothers were the primary caregivers in all the 3 areas surveyed. 80% of the families had APL ration cards and 20% had BPL status. In the intervention area, 44% of the respondents had education up to class 10th or above, compared to 37% and 40% in the control areas. The proportion of illiterate caregivers was 13% in control 1 area, 7% in control 2 area, and 6% in the intervention area.

Section 2: services related to care for child development for primary caregivers of children: The primary caregivers' assessment aimed to evaluate the accessibility and utilization of services related to physical growth and child development care. Components of the assessment aligned with the feasibility of interventions for child development care proposed for implementation in the WHO Intervida project.

Knowledge of caregivers about care for early childhood development: Caregivers in the intervention area had better responses regarding early child development. 49% of caregivers in the intervention area knew that mothers should talk to the child during breastfeeding, compared to 45% and 32% in the control areas. More mothers in the intervention area were aware that children can see and hear at birth compared to the control areas.

Home visits for care for child development: ASHA home visits were highly sought after by caregivers for children with Cerebral Cerebral Palsy. In the intervention area, 82% of caregivers reported home visits within the last month, compared to only 65% and 62% in the control areas. ASHA read SMS messages related to play and communication with caregivers in the intervention area more often than in the control areas. ASHAs in the intervention area also conducted play and communication demonstrations during home visits more frequently than in the control areas.

Participation in meetings in Anganwadi centres: Intervention area saw higher daily visits to the center (26%) compared to control areas (6% and 8%). Mothers reported interactions like message reading, play activities, and communication practices with children. Positive behavior: 24% of parents practiced these activities at home with their children.

Participation in voluntary mother's club meetings: Caregivers in the study area felt the need for a voluntary mothers' club to address issues related to child care and development (CCD). In control areas, no such voluntary club existed, despite government provisions for village health and sanitation committees and nutrition days. In the intervention area, 49% of mothers were aware of the voluntary club, 44% were members, and 41% visited the club at least twice in the last month. Play and communication activities were reported by 41% of mothers, and 38% of parents practiced these activities at home based on club discussions.

Health education messages on play and communication, feeding, prevention of illness and response to illness: In the intervention area, 68% of caregivers received SMS, 60% read it, and 31% considered practicing the message. In control areas, SMS receipt was very low (5% and 2%). In the intervention area, 62% of respondents made phone calls to SWACH for health concerns, compared to 7% and 4% in control areas. This could be due to the presence of CCD staff and caregiver awareness.

Section 3: Child primary caregiver interaction:



- **Practices for expressing love/affection to the child in the last 24 hours:** Primary caregivers (93%) in the intervention area showed more affection to their children through kissing, stroking, hugging, eye contact, kind words, and smiling compared to the control groups (48% and 41%).
- **Practices for promotion of child learning through play:** Caregivers in the intervention area (33%) were engaged in more activities to stimulate their children's learning, such as copying or mimicking the child, providing toys or play materials, playing together, going outside the home together, naming, counting, or drawing with the child, and helping the child learn new things.
- **Practices for promotion of child learning through communication:** 59% of caregivers in the intervention area practiced all four communication practices with the child i.e., talking directly, saying kind words, talking while doing household chores, and singing a song to the child.
- **Health seeking behaviors among primary caregivers:** In the intervention area, 53% of children were sick in the last month requiring a health care provider visit. 95% of sick children in the intervention area visited a health care provider. 67% of caregivers in the intervention area consulted SWACH on the phone for the child's illness. In both control blocks, unqualified village practitioners were the most commonly utilized care providers. Government health functionaries and private hospitals were not commonly utilized in any area. 0.4%, 1.2%, and 2% of children were admitted to hospitals for treatment in the intervention and control areas, respectively.

Section 4: Assessment of MCP card, its knowledge relating to weight, feeding, play and communication of the child and its use during last 24 hrs:

- In the intervention area, 94% of children had MCP cards, while in control areas 1 and 2, 73% and 70% of children had them.
- Weights were recorded at least once for 85% of children in the intervention area, compared to only 17% and 8% in the control areas. In the intervention area, anganwadi workers weighed children monthly and plotted the weight on their MCP cards, a system that was not in place in the control areas.
- In the intervention area, 68% of caregivers could correctly interpret the green color on the MCP card (normal weight), 63% could correctly interpret the yellow color (weak child), and 57% could correctly interpret the brown color (very weak child). In the control areas, only 3-5% of caregivers could correctly interpret the colors.
- 55%, 48%, and 46% of mothers could correctly interpret the growth trajectory on the MCP card in the intervention area, compared to only 2-4% in the control areas.
- In the intervention area, 59% of mothers could locate the feeding box on the MCP card, compared to 25% and 17% in control areas 1 and 2 respectively.
- Over 60% of mothers in the intervention area could interpret the text they read on the MCP card, compared to 28% and 24% in control areas 1 and 2.
- 67% of mothers in the intervention area could read the play and communication box on the MCP card, compared to 31% and 30% in control areas 1 and 2.
- Understanding and visualization of the message read by mothers was higher in the intervention area (65%) compared to control areas 1 and 2.
- The intervention area emphasized the importance of the MCP card during group sessions and home visits, leading to better knowledge and understanding among mothers.

Section 5: Maternal Depression: Depression in mothers was found low in Intervention area as compared to control area 1 & 2.



Nutritional status of children

- In the intervention area, 12% of children were wasted, 32% were stunted, and 16% were underweight. In the control blocks, the prevalence of wasting, stunting, and underweight was higher.
- In the intervention area, 6% of children had low Mid upper arm circumference, significantly lower than the control blocks, where it was 23% and 30%. This suggests better nutritional status in the intervention area compared to the control blocks.
- In the intervention area, the difference in underweight children between APL and BPL families was small, indicating equal service provision and willingness to use services. In both control areas, the difference in underweight children between APL and BPL families was significant, ranging from 21% to 45%. The prevalence of wasting in children of APL and BPL families in the intervention area was similar at 12%. In both control blocks, the difference in wasting between APL and BPL families was between 3% and 7%, with higher prevalence in BPL families.
- In the intervention area, 30% of children from APL (Above Poverty Line) families and 42% from BPL (Below Poverty Line) families were stunted. Even though CCD services were provided, stunting remained higher in BPL families, indicating that it takes longer to improve. In the control blocks, 33% and 39% of children in APL families were stunted compared to 46% and 48% in BPL families. This suggests that stunting was more prevalent in BPL families in both intervention and control areas.
- In the intervention area, there was no significant difference between APL and BPL families in terms of low mid-upper-arm circumference (MUAC). In the control blocks, more children from BPL families had low MUAC compared to APL families, indicating that BPL children were more likely to be underweight.

Conclusion: The earliest years represent the period of the most dramatic development in the individual's life. At the same time, these are also the years of greatest vulnerability. If the young child is surrounded by supportive and positive influences it is likely that he/she will survive and thrive. These outcomes, surviving and thriving, are, to a very large extent dependent upon how well-equipped families, especially primary caregivers are to care for, respond to and manage the needs of young children from birth onwards. The most rapid period of a child's growth is during the early years. This sets the foundation for all later well-being. All children need protection and care during early years to support all aspects of their growth and development – physical, social, emotional, cognitive and spiritual.

The study has confirmed mother as the primary care giver with grand mother and father playing supportive role. The centrality of family and parental care giving has been observed. There is a lot of scope for improvement in the knowledge and skills of the providers on child feeding and child development. Focused groups identified the need for meetings of village based voluntary groups with emphasis on CCD and child feeding. Also, using a continuum of care approach across life stages (0-3 years) is crucial. It was feasible to Implement and scale up strategies of Care for Child Development.