



GO BABY GO

Evaluation of "Go Baby Go" child development programme among vulnerable groups in Sri Lanka-
A pragmatic cluster randomized trial



Report prepared by
Amandhi Caldera¹, Ruwanthi Perera¹, Pavithra Godamunne¹,
Rajitha Wickremasinghe¹ and Rohan Jayasuriya²

¹ Faculty of Medicine, University of Kelaniya, Sri Lanka

² University of New South Wales, Australia

Acknowledgements

This report was developed through the contribution of many organizations and persons. We thank the World Vision Lanka team, Dilka Peiris, Shyama Silva and Piratheeban Mayuran for their unwavering support and dedication towards the implementation of the project, despite the many barriers encountered during the implementation of the project. We sincerely thank the World Vision International team comprising Viktorya Sargsyan, Esther Indriani, Andrew Clucas and Ann Munene for initiating the Go Baby Go parental Intervention programme in Sri Lanka, for helping to design the evaluation and for their inputs in the preparation of the report. We thank World Vision Lanka leadership for the cooperation and support provided towards this evaluation. We are grateful for the participation of the facilitators of the Go Baby Go intervention package from Chankanai, Karachchi, and Ridigama. The facilitators were the focal points of the project and their commitment to the study and to their desire to uplift child development in the country is greatly appreciated. We thank the volunteers of World Vision Lanka in the study areas for carrying out tasks to ensure the smooth execution of the project. We extend our sincere gratitude to all the caregivers who participated in the project. This project would have not been possible if not for your commitment towards the development of your children and dedication to improving your skills as a caregiver. Last but not least, we thank all the children who participated in research.

The financial assistance that was provided by the Evidence Building Fund of World Vision International is gratefully acknowledged.

TABLE OF CONTENTS

Table of Contents	3
List of Tables	6
List of Figures.....	8
List of Annexures	9
List of abbreviations	10
EXECUTIVE SUMMARY.....	11
Introduction.....	14
Go Baby Go Integrated model for early childhood development	14
THE CH & N PROGRAMME.....	16
Infant and Young Child feeding (IYCF) programme	16
Water Sanitation and Hygiene programme (WASH)	16
Study purpose.....	17
Intervention.....	19
Training of Facilitators (ToFs)	20
Facilitator Attendance	21
GBG Group Sessions	23
Participant Attendance.....	24
Observations made by uok	24
GBG Home Visits.....	24
IYCF and WASH programmes.....	25
Facilitator performance.....	25
Endline Assessment-quantitative analysis.....	26
Changes in end line assessments	26
Enumerator training	27
Study Areas.....	28
Study Sample	28
Pilot of the endline assessment (adapted survey instrument).....	30
final evaluation and findings	30
reliability of the measurements.....	31
Ethics Approval.....	31
Endline Assessment- Qualitative Study	32
Method.....	32

Phase 1	32
Phase 2	32
Ethics Approval.....	33
Participants and recruitment.....	33
Data collection.....	34
Data analysis.....	35
-Process of Transcription and Translation	35
-Process of Thematic Analysis	35
Reflexivity	35
Results of the quantitative study.....	36
Feeding Practices.....	36
Breastfeeding.....	36
minimum acceptable diet.....	39
Minimum Dietary Diversity (MDD) and Minimum Meal frequency	39
Responsive feeding.....	41
Health Protection	51
Child Stimulation Practices	52
Caregiver and Child Interaction.....	64
Child Protection	69
Child Neurocognitive Development	71
CREDI.....	71
Maternal mental health.....	75
changes in caregiver practices due to covid19 restrictions.....	79
Usefulness of the intervention	82
Results of the QUALITATIVE analysis.....	83
Theme 1 : Knowledge gain and behavior change in participants	83
Subtheme 1: Optimizing brain development	83
Subtheme 2: Child safety.....	86
Subtheme 3: Nutrition.....	87
Theme 2: There were barriers to participation	88
Subtheme 1 – accessibility	88
Subtheme 2- Caregiver support.....	89
Subtheme 3 – Caregiver motivation	90
Theme 3: Deviations from the protocol	92
Subtheme 1 - GBG Session	92

Subtheme 2 - Home visits.....	93
Subtheme 3- IYCF, WASH	95
Subtheme 4 – Monitoring.....	95
Theme 4: The intervention sessions can improve	96
Subtheme 1 : Selecting facilitators	96
Subtheme 2 : Organization	98
Subtheme 3 : Editing manual to suit local context	100
Discussion	100
Facilitators	102
Implementation of intervention	103
Endline evaluation	104
Results of quantitative study	104
Home visits	109
IYCF and WASH	109
Findings from quantitative and qualitative results.....	110
Limitations	111
Deficiencies in protocol adherence during implementation.....	111
Deficiencies in training and supervision.....	111
Data quality, consistency and availability	112
Instruments	112
Recommendations.....	113
Providing awareness of the program	113
Recruitment and Training of facilitators.....	113
Documentation	113
Monitoring.....	114
Better organizing	114
Conclusion	114
References.....	116
Annexures.....	118

LIST OF TABLES

Table 1: Changes in the assessments made during endline	26
Table 2: Participation of caregivers by GN area.....	28
Table 3: Endline assessment summary	29
Table 4: Study area and number of Focus group interviews conducted	33
Table 5: Participants of qualitative study	34
Table 6: Endline assessment summary according to the study group.....	36
Table 7: Exclusive Breastfeeding of the child (did you exclusively breast feed your child from 0- 6 months?).....	37
Table 8: Breastfed yesterday (did you breast-feed your child yesterday?)	38
Table 9: Breastfeeding after 24 months.....	38
Table 10: Minimum dietary diversity	39
Table 11: Endline MDD in control group by baseline classification.....	40
Table 12: Endline MDD in intervention group by baseline classification.....	40
Table 13: Minimum meal frequency	41
Table 14: Comparison of reading to the child between the intervention groups and the control group at baseline and endline	52
Table 15: Comparison of reading to children at endline by baseline and group.....	53
Table 16: Comparison of storytelling to the child between the intervention and the control groups at baseline and endline	54
Table 17: Comparison of story-telling to children at endline by baseline and group	54
Table 18: Comparison of singing to the child between the intervention groups and the control group.....	55
Table 19: Comparison of singing to children at endline by baseline and group	56
Table 20: Comparison of taking the child out for a walk between the intervention and the control groups.....	57
Table 21: Comparison of taking the child out for a walk at endline by baseline and group	57
Table 22: Comparison of playing with the child between the intervention and the control groups.....	58
Table 23: Comparison of playing with the child at endline by baseline and group	59
Table 24: Comparison of naming objects with the child between the intervention and the control groups at baseline and endline	59
Table 25: Comparison of naming objects with the child at endline by baseline and group.....	60
Table 26: Comparison of stimulation methods between the intervention and control groups	62
Table 27: Comparison of use of home-made toys between baseline and endline.....	64
Table 28: Comparison of caregiver-child interactions between control and intervention groups at baseline and endline	65

Table 29: Disciplining actions used by caregivers on children in control and intervention groups at end line	69
Table 30: Comparison of raw CREDI scores between intervention and control	72
Table 31: Development of children at endline by group	73
Table 32: Comparison of development of children in control and intervention groups by age group.....	74
Table 33: WEMWBS scores between the intervention and control groups.....	76
Table 34: PHQ – 9 questionnaire for screening depression between the intervention and control groups	76
Table 35: Impact of the COVID-19 pandemic	80
Table 36: Usefulness of the GBG intervention.....	82
Table 37: Summary of themes and Subthemes.....	83

LIST OF FIGURES

Figure 1:	TOF: Rideegama – Session 9 and 10	23
Figure 2 :	TOF: Karachchi – Session 7	23
Figure 3 :	TOF: Chankanai	23
Figure 4 :	It is important to smile and look at the infant's face while feeding.....	43
Figure 5 :	Teach the child to eat patiently and lovingly.....	43
Figure 6:	Actively help the child to eat.....	44
Figure 7:	Help the child but do not use physical restrain while feeding.....	44
Figure 8:	Praise / encourage child to eat and give positive comments.....	45
Figure 9:	Respond to child refusal by waiting and offering one more bite.....	45
Figure 10:	Encourage experience with self-feeding or give finger foods.....	46
Figure 11:	My child should always eat all of the food on his/her plate.....	46
Figure 12:	If my child says, ‘I’m not hungry,’ I try to get him/her to eat anyway.....	48
Figure 13:	If my child eats only a small helping, I try to get him/her to eat more.....	48
Figure 14:	If I did not guide or regulate my child's eating, s/he would eat too much of his/her favourite foods.....	48
Figure 15:	If I did not guide or regulate my child's eating, he/she would eat too many junk foods.....	49
Figure 16:	I have to be sure that my child does not eat too much of his/her favourite foods	50
Figure 17:	Diarrhoea in children during the past two weeks.....	51
Figure 18:	Cough in children during the past two weeks.....	51
Figure 19:	Fever in children during the past two weeks.....	53
Figure 20:	Comparison of child stimulation practices at baseline and endline	62
Figure 21:	Availability of children's' books at home.....	62
Figure 22:	Types of toys the child plays with.....	65

LIST OF ANNEXURES

Annexure A- Approvals for amendment

Annexure B- Plan according to the protocol

Annexure C- Actual Implementation

Annexure D- Observations

Annexure E- Mentor Reports

Annexure F- Responsive Feeding data

Annexure G- Study instruments

LIST OF ABBREVIATIONS

BSID-III	Bayley scales of infant and toddler development III
CH&N	Child health and nutrition
CREDI	Caregiver reported early developmental index
ECD	Early childhood development
GBG	“Go baby go”
GN	Gramaniladhari
IYCF	Infant and young child feeding
ODK	Open data Kit
PHQ-9	Patient Health Questionnaire
ToF	Training of Facilitators
ToT	Training of Trainers
WASH	Water, sanitation and hygiene
WEMWBS	Warwick Edinburgh Mental Well-being Scale
WVL	World Vision Lanka
FGD	Focus Group Discussion

EXECUTIVE SUMMARY

Child health sectors in Sri Lanka have prioritized uplifting caregiver skills to optimize child development. Relatively poor knowledge of Early Childhood Development (ECD) and lack of focused strategies to impart required knowledge and skills to caregivers are identified as factors that need further improvement within the country.

Early Childhood Development Standards for Sri Lankan infant and toddlers have been developed and are to be implemented in Sri Lanka. We report here baseline findings of the study titled “Evaluation of “GO BABY GO” child development programme among vulnerable groups in Sri Lanka; a pragmatic cluster randomized trial”. The objective of the study was to evaluate the effects of an integrated ECD intervention provided to mothers/primary caregivers of children under three years of age. The integrated programme included the Child Health & Nutrition (CH &N) programme of World Vision Lanka and the Go-Baby-Go (GBG) parenting programme of World Vision International in Sri Lanka. We report here the findings of the evaluation.

Due to the COVID-19 pandemic certain changes were made to the original proposal. These changes were approved by the Ethics Review Committee, Faculty of Medicine, University of Kelaniya and Sri Lanka Clinical Trials Registry (SLCTR). We were unable to conduct the Bayley assessment and anthropometric measurements that were administered at baseline at endline. The endline assessments were conducted through telephone interviews. A qualitative research component was included into the endline assessment to understand the perspectives of participants, stakeholders and facilitators of the study regarding the intervention. Eight focus group discussions with caregivers as well as three focus group discussions with facilitators were carried out. Four in-depth interviews were conducted with stakeholders (mentors and research assistants) of the study. The in-depth interviews for the qualitative studies were conducted in person or by using the zoom platform.

At endline, four aspects of feeding practices were assessed; breast feeding beyond 6 months, minimum meal frequency (MMF), minimum dietary diversity (MDD) and responsive feeding. A

significantly higher proportion of children in the intervention group who did not have MDD at baseline did have MDD at endline. A significantly higher proportion of children in the intervention group received continued breast feeding and fulfilled MDD compared to the control group. However, a significantly higher proportion of children in the intervention group have continued to be breastfed beyond 24 months which according to national guidelines should be discouraged. There was no difference between the two study groups in terms of MMF or aspects of responsive feeding.

Child stimulation was assessed by measuring the frequency of caregiver engagement with the child through the following 6 activities: reading, story-telling, singing, taking the child out for a walk, playing and naming. Children in the intervention group had a higher likelihood of being stimulated through reading, singing, being taken out for a walk and playing after controlling for the level of stimulation they received at baseline. A significantly higher proportion of children in the intervention group had more home-made toys at endline. Children in the intervention group had a significantly less screen time compared to the children in the control group. However, there was no difference in the availability of books between the two study groups. The caregiver child interaction measured by the Brigance scale was similar in the two groups at endline.

Out of all the disciplining methods considered in this study, caregivers in the intervention group reported significantly less slapping incidences than the control group; in all other disciplining methods, the two study groups were similar at endline.

There was no significant difference between the CREDI scores of the intervention and control groups at endline for any age group or development domain of the child. Caregivers in the intervention group had significantly higher mental wellbeing and lower depression scores compared to the scores of the caregivers of the control group.

Four prominent themes emerged from the thematic analysis of the qualitative study. The first theme “Knowledge gain and behaviour change in participants” focuses on the usefulness of the intervention to the caregivers. The second theme “barriers to participation” focuses on issues such as transport and communication channels that posed as barriers for the smooth implementation of

the intervention. The themes “deviations from the protocol” and “intervention sessions can improve” discuss the implementation of the intervention and suggestions for further improvement.

The caregivers and facilitators of the intervention group confirmed that the GBG intervention was useful. The results also indicate that the caregivers’ skills in the intervention group has significantly improved from baseline to endline assessment. The caregivers of the intervention group added that they had a better understanding of child development and their contribution towards the development of their child.

The study also revealed that when carrying out interventions at community level, frequent monitoring, giving feedback to facilitators, ensuring the capacity of facilitators and proper documentation are critical towards achieving overall success of the intervention. As the intervention is implemented in a community, the societal issues such as poverty, addiction and safety need to be addressed alongside the intervention.

INTRODUCTION

GO BABY GO INTEGRATED MODEL FOR EARLY CHILDHOOD DEVELOPMENT

The “Go Baby Go” (GBG) early childhood development parenting programme model, developed by World Vision International, targets caregivers of 0 – 3-year-old children and aims to build knowledge, skills and resilience-promoting techniques to improve parenting practices at the household level (“Go Baby Go | World Vision International,” n.d.).

The programme consists of 10 compulsory sessions for primary caregiver and two optional sessions for fathers based on evidence-based practices, and is aimed at assisting parents to understand the interrelatedness of health, nutrition, protection and development, strengthen their skills and competencies in nurturing care¹ practices. It also provides caregivers with planning and self-care strategies, so they can better fulfil their roles as the primary protector and teacher in the life of a child.

The program is implemented in 2 approaches; group sessions and home visits. The group sessions focus on introducing and identifying the role of a caregiver, combined with active skills building for; holistic child development: sensitive and responsive caregiving; nurturing physical, cognitive and language, social and emotional development; play and communication; importance of home environment; well-being as a family affair; and two optional sessions for fathers. During home visits, the facilitator identifies barriers for successful adoption of the GBG programme, including psychological first aid support for caregivers and provides context specific guidance by mentoring and coaching caregivers in age-appropriate play and communication and responsive caregiving nurturing care practices. To achieve significant impact, parenting programmes should be implemented for a minimum of 6 months. Therefore, it is recommended that GBG, including both the caregiver group sessions and home visits, is implemented for a minimum of 6 months through a facilitator from the community (World Vision International, 2017). While this training targets primary caregivers of young children, it places their role within the family and community context as critical during a child’s early life experiences.

¹ **Nurturing care** refers to a stable environment created by parents and other caregivers that ensures children's good health and nutrition, protects them from threats, and gives young children opportunities for early learning, through interactions that are emotionally supportive and responsive (WHO).

The Go Baby Go programme is built on evidence-based parenting practices using behaviour change communication, appreciative inquiry and positive deviance approaches. These strategies are built on caregivers' existing knowledge about child-rearing and can leverage their strengths and assets as a community to enable their children to have the best possible start in life.

The manual also gives different methods to conduct a 6-month programme and this study used the 2nd option in which group sessions were conducted bi-weekly and a minimum of 2 home visits to be done within 4 months and subsequently a minimum of two home visits to occur every 2 months. Since the intervention phase of the study runs approximately 6 months, the expected number of home visits to be conducted was 4.

The meeting place, or GBG learning space should be easily accessible for group members, quiet without disruptions, with space for dynamic activities. A GBG corner (where children can play while the caregivers are learning) should be established in the meeting room. Adequate number of volunteers should be selected from the community to look after the children.

The first home visit should have ideally taken place before the group sessions, to serve as introduction to the program and an invitation to join. If a participant misses a session, the facilitator was expected to conduct an additional home visit to find out what's the problem, provide missed information and reinforcement of learning. Missing sessions may be a sign of vulnerability, which makes it very important to follow up and make sure appropriate support is provided.

Each group should have had at least one facilitator for every 15 participants. Ideally, each group should have had a team of two facilitators, which would have enabled them to work together, share sessions and home visits, monitor group activities, cover each other if one facilitator needs to miss a session, care for children in the GBG corner etc.

The recommended group size was 10-15 people. Each caregiver group should not be larger than 15 participants for the program to be effective. If needed, more sessions were created, or another facilitator started a second group, to accommodate interested participants. In this study, each group had at least one facilitator for every 15 participants as recommended in the manual.

THE CH & N PROGRAMME

The Child Health and Nutrition (CH&N) programme of the Ministry of Healthcare, Nutrition and Indigenous Medicine, Sri Lanka comprises two early childhood developmental programmes; The Infant and Young Child feeding (IYCF) programme and the Water Sanitation and Hygiene (WASH) programme. The IYCF programme and Water, Sanitation and Hygiene (WASH) programme are conducted by the Medical Officer of Health through Public Health Midwives (PHMs) of the Ministry of Health, Nutrition and Indigenous Medicine and WVL, collaboratively.

INFANT AND YOUNG CHILD FEEDING (IYCF) PROGRAMME

World Vision Lanka used the Infant and Young Child feeding (IYCF) programme guidelines, prepared by the Family Health Bureau of the Ministry of Healthcare, Nutrition and Indigenous Medicine, in both intervention and control arms. This intervention was carried out in collaboration with the local Medical Officers of Health in order to ensure uniformity in the messages given. The medical officers or PHMs conducting the programs in intervention and control areas were different.

The programme promotes early initiation of breastfeeding; exclusive breastfeeding for 6 months; complementary feeding for children 6-23 months of age who receive a minimum acceptable diet including both the minimum feeding frequency and minimum dietary diversity, and feeding during illness and continuation of breastfeeding for two or more years with complementary feeding. The programme is also designed to improve responsive feeding and safe preparation of food (MoH, 2014). The programme consists of nine modules, which include interactive and informative sessions, starting from the pregnancy period until the child is 24 months. For the illness prevention component, the programme focuses on the following: Acute Respiratory Infections, Dengue Fever, Diarrhoea, and other water-borne diseases that are prevalent in the areas of implementation of the programme. The nine modules will be covered through 2-day groups sessions.

WATER SANITATION AND HYGIENE PROGRAMME (WASH)

This programme was conducted by WVL following the guidelines of the Ministry of Health with technical support of respective Medical Officers of Health (MOH) to improve water and sanitation services, while improving basic hygiene practices at home with a focus on sustainable development goal 6 which impacts on health, life expectancy, student learning and gender equality.

The awareness raising programme promotes the importance of sanitation, water quality and treatment, hand washing, and hygiene promotion in families and is implemented at community level through two group sessions.

STUDY PURPOSE

The objective of this study was to evaluate the effects of an integrated early childhood development (ECD) intervention provided to mothers/primary caregivers of children under three using the Child Health & Nutrition (CH&N) of World Vision Lanka and Go-Baby-Go (GBG) parenting programme of World Vision International in Sri Lanka. The study aimed to identify the effect of integrated health and ECD package of the proposed intervention in a pragmatic setting which will provide evidence for national policies and guidelines on ECD and scaling up of the intervention in the wider system.

The main hypotheses tested (as per the protocol) were:

- Children of mothers/primary caregivers provided with the integrated GBG intervention and CH&N programme would exhibit better age appropriate child developmental outcomes than controls provided with the World Vision Lanka CH&N programme only.
- Mothers provided with the GBG intervention would exhibit higher levels of responsive parenting skills for their children under three years of age than controls provided with only the standard World Vision Lanka CH&N programme*
(*CH&N program was conducted by WVL under the guidance of the ministry of health)
- Children of mothers/primary caregivers provided with the CH&N programme will have a better nutritional status following the intervention.

The Go baby Go intervention was tested with vulnerable populations selected from three World Vision area programmes in Rideegama, Chankanai and Karachchi. The study was conducted in three main phases; the baseline assessment, intervention and endline assessment. The baseline assessment was conducted by making house visits to consented caregivers. The survey consisted of a caregiver survey which assessed caregivers and the child across 13 subscales, child anthropometry, and child development assessed through BSID-III and Caregiver Reported Early Development Index (CREDI).

At baseline, the control and intervention arms were similar with respect to socio-demographic factors, caregiver characteristics, child characteristics, breast feeding practices, complementary feeding, minimum meal frequency, feeding during illness, health protection, child protection, child stimulation and caregiver-child interaction, child development as assessed by BSID-III and CREDI, and anthropometric indices. The two groups were different in terms of minimum dietary diversity and certain aspects in health promotion. Overall, the participants in the intervention and control arms were mostly similar at baseline (Refer to baseline report).

The Go Baby Go programme commenced in August, 2019 and continued for 7 months. During this period the control group received the CH&N programme and the intervention group received the Go Baby Go intervention in addition to CH&N.

Following the intervention, the endline assessment was carried out after a delays of 3 months due to COVID. Due to the COVID-19 situation in the country the study had to deviate from the main protocol. In certain Grama Niladhari (GN) areas especially in Karachchi area, the 9th and 10th group sessions could not be completed. The endline assessment, which was previously designed as a survey done via house visits, was conducted as phone interviews (adapted caregiver survey, with 14 subscales, CREDI, questions regarding COVID). As a result, several key assessments such as BSID-III and anthropometry could not be done. With the COVID-19 situation, several new confounding factors were identified and the caregiver survey was revised to assess those identified confounders (Annexure B).

This report presents the observations during the intervention and the findings of the endline assessment by the research team of the Faculty of Medicine, University of Kelaniya. UoK was responsible for developing and conducting the baseline and endline surveys, data analysis and preparation of the report. World Vision Lanka was responsible for training of facilitators, conducting the intervention and monitoring the implementation of the intervention. Furthermore, UoK also conducted field monitoring.

INTERVENTION

This project used a pragmatic parallel group cluster Randomized Controlled Trial (cRCT) study design. Prior to the intervention a baseline assessment was conducted, which confirmed that the intervention and control groups of the study were generally similar at baseline (ref-baseline report).

The intervention was conducted in the following phases:

Phase I- Training of trainers (ToT) for GBG sessions

Phase II- Inviting participants for the intervention

Phase III- Group sessions

Phase IV- GBG Home visits (4 sessions for each participant)

Phase V - CH&N Sessions

IYCF - in 3 sessions

WASH- in 2 sessions

The ToTs were scheduled to be started in the first week of March 2019. However, due to delays in obtaining permission from relevant regional authorities and due to the Easter Sunday terrorist attack on 21st April and subsequent security measures taken, baseline data collection was delayed; the intervention was started in the last week of July.

Annexure B includes the implementation plan that was agreed upon by WVL and Faculty of Medicine, University of Kelaniya *prior* to intervention.

Annexure C includes the actual implementation of the GBG group sessions by communities from all three areas that were conducted from August to March, 2020. Annexure C also includes the details of the IYCF and WASH sessions conducted for the intervention group and control groups. IYCF was conducted in Arali North and Arali East. However, there is no date mentioned on the attendance form.

TRAINING OF FACILITATORS (TOFS)

Training of facilitators for GBG sessions were scheduled to be conducted in 3 phases. However, given the fact that facilitators found it difficult to recall the sequence of conducting the sessions such as introducing content of later sessions in earlier sessions, it was decided to conduct ToFs for each session separately. Since sessions 9 and 10 were relatively short, the training for those sessions were combined. This was decided by the mentors in the 3 areas based on their experience. It was communicated to the team at Faculty of Medicine, University of Kelaniya and WVL. The decision was thereafter discussed at a group meeting with WVI team and it was approved.

WVL trained staff conducted the training of facilitators' workshops. All facilitators and co-facilitators participated in the training. The facilitators were usually pre-school teachers and the co-facilitators were volunteers from the community. The training sessions were conducted at suitable venues with required instruments and material. According to the protocol, the trainings should be done in 3 phases. Following that Ridigama conducted the first training which included the first 3 sessions. However, in the North only 2 GBG sessions were included in the first training session. Both research assistants and the mentors observed that the content covered per training session was too much in content and the facilitators would often confuse activities from other sessions while training caregivers. Therefore, the mentors decided to train the facilitators prior to each session.

The sessions were conducted in a similar manner as an actual session would be conducted where the trainer plays the role of a facilitator and facilitator plays the role of caregivers. The trainers were friendly and supportive and encouraged facilitators to clarify doubts by asking questions. Figures 1 to 3 include images from GBG ToF sessions.

It was observed in the 1st- 3rd session of the ToF that the translations of the full manual were not available to the facilitators and only an abridged version was provided to them. We feel that this version is not adequate for someone who is being trained to be a facilitator in the GBG programme because the abridged version did not have detailed descriptions of the concepts and only served as a basic guide. The UoK team observed the facilitators conducting activities from session 2 at the session 1 caregiver training program. This probably took place because they did not have a manual to refer when needed. This also may have hindered self-learning through reading. It was clear to the research assistants from UoK that some of the concepts taught in the GBG manual were novel to the facilitators and did not fully understand those concepts. However, not many facilitators took

down notes. This raises the question of how much of what has been taught during the ToF has actually reached the caregivers and how accurately the information has been transferred.

FACILITATOR ATTENDANCE

Table 1 includes the dates the GBG ToF sessions were conducted in the three study areas. The attendance of the facilitators at the Kurunegala training sessions were not received (Annexure C).

Figure 1:ToF
Rideegama- Session 9
and 10



Figure 2:ToF-
Session 7-
Karachchi



Figure 3:ToF -
Chankanai



GBG GROUP SESSIONS

GBG group sessions were conducted at each Grama Niladhari (GN) area by a facilitator/co-facilitator pair. The sessions were conducted in a common area in each site such as a community center or a preschool. Some facilitators in Kurunegala stated that some sessions were conducted at a caregivers' home. When the research assistants visited the sessions, they observed that the child corner facility was not in place during the sessions. However, one co-facilitator in Kurunegala stated that she looked over the children while the session was being conducted.

In the Rideegama area, even though some GN areas had more than 15 registered participants, participation was less than 15 participants per group, therefore, a single group per session was adequate. However, in Chankanai and Karachchi, as a single GN area had a higher number of participants, multiple group sessions had to be done for a single GBG session. This was effectively done, conducting as many as 4 group sessions for a single GBG session in some GN areas. On average a facilitator -co facilitator pair conducted sessions for one cohort. This information is indicated in Annexure C. However, the splitting of the group has not been consistent for the different sessions.

Other interested caregivers, even though they were not part of the study, have participated in the sessions willingly. However, the UoK team has not received data regarding the other caregivers (who were not participants of the study) but who attended the sessions. Due to COVID, the session for fathers was not conducted in any of the study areas.

This study initially was scheduled to follow a bi-weekly frequency of intervention where group sessions were held in every alternate week. However, in many GN areas this has not been followed and sessions had been conducted as close as 4 days and as far as 2 months apart (Refer Annexure C).

As at March 01st 2020, Kurunegala had completed all 10 sessions in one GN (Diniminyathenna), 9 sessions in Nethulpitiya and 8 sessions in Wanduressa and Kandupalatha, while Chankanai conducted session 10 in all intervention areas except for Arali North and Vaddu South that continued the program till the completion of session 8. Karachchi had completed 8 sessions in all intervention areas (Refer Annexure C).

PARTICIPANT ATTENDANCE

Participants in the intervention group were required to attend both WASH/IYCF sessions and all of the GBG group sessions. If a participant missed a group session, the content was supposed to have been covered during a home visit by a facilitator. Overall, 388 caregivers from the intervention sites were targeted for 10 GBG sessions, 2 WASH sessions and 2 IYCF sessions making a total of 14. The attendance rate was divided into four categories: never attended; attended less than 50% of the total sessions; attended 50-80% of sessions; and attended more than 80% of the sessions. Table 2 in Annexure C summarizes the attendance for each session in the three study areas based on the attendance that has been received by UoK team. The attendance of the control group for IYCF and WASH sessions was not provided.

OBSERVATIONS MADE BY UOK

The UoK team had a research assistant permanently in the field managing all the sessions in Jaffna and Kilinochchi. In addition, two other research assistants also visited the North and Kurunegala periodically during the intervention. However, due to budget restraints, WVL requested the UoK team to reduce field visits from October, 2019 till January 2020. Three of the Research Assistants of the Faculty of Medicine, University of Kelaniya, recorded their collective observations of two GBG sessions (Chankanai and Karachchi) for their completeness using checklists developed based on the manual. Annexure D include the data on the observations of the sessions from Chankanai and Karachchi sites. The team from UoK offered to do a process evaluation of the intervention to monitor the quality of the intervention, however, this budget was not approved by WVL.

GBG HOME VISITS

The programme consisted of 4 home visits. The 4 home visits were distributed as follows;

- First home visit before the group sessions
- Second and third home visits during the sessions
- Fourth visit after the sessions were completed

Home visits were done by the co-facilitator. Overall, 388 caregivers received home visits. The rate of home visits by facilitators are divided into three categories: no house visits conducted; 3 or less house visits conducted; all 4 house visits conducted (see Table 3 in Annexure C presenting the percentage of home visits completed by the all facilitators, in three intervention study sites). On average 80% of the caregivers in all three areas received at least 1 house visit.

IYCF AND WASH PROGRAMMES

No sufficient information was received regarding IYCF and WASH programmes from both control and intervention sites.

FACILITATOR PERFORMANCE

The trained GBG mentors evaluated the performance of the GBG facilitators during the GBG sessions for effective communication and successfully imparting the knowledge to the caregivers. The mentor in Kurunegla was supporting 5 facilitators and 5 co-facilitators and the mentor in Chankanai and Karachchi were supporting 10 facilitators and 10 co-facilitators. Each pair of GBG facilitator and co-facilitator was supposed to have been observed by the mentor three times for the GBG group session. What's the average score given by the mentors was 31.87 (out of total score of 40). The overall strengths and weaknesses of the facilitators pointed out by the mentors are included in the Annexure H (Please see Annexure E on *GBG Mentor reports - performance of facilitators/co-facilitators for GBG group sessions*). The UoK team has received only 50% (15 of 30) of the evaluation forms that were supposed to be completed by mentors.

ENDLINE ASSESSMENT-QUANTITATIVE ANALYSIS

CHANGES IN END LINE ASSESSMENTS

As a result of the restrictions imposed by the Government due to COVID-19 and related requirements to for social distancing to reduce transmission of COVID-19, certain assessments that were administered during the baseline could not be carried out at endline. The Table 1 below indicates the assessments conducted or questionnaires administered during the baseline and endline surveys. The instruments used in the study is in Annexure G.

Table 1: Changes in the assessments made during endline

Assessment	Conducted during baseline	Conducted during endline	Justification for the change
1. Bayley Scales of Infant & Toddler Development, third edition (BSID-III)	Yes	No	The Bayley assessment requires direct child assessment by a trained enumerator, therefore, this assessment was excluded at the endline survey.
2. Caregiver Reported Early childhood Developmental Index (CREDI)	Yes	Yes	Adaptation: The pictures of reference required for the administration of CREDI were delivered to the homes of all the endline participants, and caregivers reported .via phone interview.
3. Patient Health Questionnaire 9 (PHQ 9)	Yes	Yes	Adaptation: Via phone interview
4. Warwick Edinburgh mental wellbeing scale (WEMWB Scale)	Yes	Yes	Adaptation: Via phone interview

5. Anthropometry (weight, length or height, and head circumference)	Yes	No	The anthropometric assessments requires direct child measurements by a trained enumerator, therefore, this assessment was excluded at endline.
6. Caregiver questionnaire	Yes	Yes	Adaptation: Certain scales within the caregiver questionnaire such as exclusive breast feeding, feeding during illness, breastfeeding questionnaires were not administered at endline to reduce the duration of the phone interview. Some items added to assess the effect of COVID-19 on parenting practices.

ENUMERATOR TRAINING

The three research assistants from The Faculty of Medicine, University of Kelaniya, trained seven enumerators on the 11th of June, 2020 to conduct the endline assessment. The one-day workshop was conducted through Zoom. Initially all enumerators were requested to download the Open Data Kit (ODK) app to their mobile phones and were guided on how to use the app during data collection. Thereafter, each item in the endline caregiver and CREDI questionnaires were discussed with the enumerators during the training.

Five enumerators were Tamil speaking and were trained to conduct the assessments in Chankanai and Karachchi. The two Sinhala speaking enumerators were trained to conduct the assessments in Ridigama. The participants' lists were equally divided among the enumerators according to the language of administration.

STUDY AREAS

STUDY SAMPLE

The initial estimated minimum sample size was 660 which included a 30% drop out rate from baseline to endline. However, all who consented to participate from a particular GN area were included in the study and at the end of the baseline survey 694 caregiver/child dyads were assessed. These 694 caregiver/child dyads were included in the endline and the final sample was 542. The dropout rate was 21.3% which is less than the anticipated dropout rate of 30%. The number of dropouts in the intervention group from baseline to end line assessment was 60 (15%) while in the control group the total number of drop out was 88 (28.1%) (see Table 2). In total 542 records were retrieved from the database, and 4 records were not saved in the database. The highest participation rate in the end line was registered in Ridighama area (almost 86%), and the lowest was in Karachchi area (around 76%). The Table 2 includes the numbers of participants in each GN at baseline and end line assessments. Table 3 includes a summary of the endline assessment and the reasons for dropout at end line.

Table 2: Participation of caregivers by GN area

Province (Area)	GN area	N		GN area	N	
	(intervention group)	Baseline	Endline	(control group)	Baseline	Endline
Kurunegala (Ridigama)	Wanduressa	21	16	Jankure	04	02
	Diniminyateena	16	16	Kithulgolla	07	07
	Nethulpitiya	09	05	Paragoda	15	13
	Kadupalatha	07	06	Niyangama	13	13
				Pallehorombuw a	13 08	13 07
				Nelaulla		
Total		53	43	Total	60	55

Jaffna (Chankanai)	Tholpuram West	33	24	Arali East	33	33
	Moolai	34	28	Ponnalai	41	34
	Chulipuram East	37	30	Pannakam	28	14
	Chulipuram West	23	22	Pannipulam	22	03
	Arali North	29	29			
	Vaddu South	21	17			
Total		177	150	Total	124	84
Kilinochchi (Karachi)	Akkarayan	51	49	Ottupulam	12	07
	Skanthapuram	38	35	Puthumurippu	27	10
	Ambalkulam	29	18	Selvanagar	32	22
	Krishnapuram	35	28	Paranthipuram	17	11
				Ambalnagar	39	34
Total		153	130	Total	127	84

Table 3: Endline assessment summary

Area	Completed	Incomplete				Total	Total	Success
		Not reachabl e/ cannot locate	No contact numbe r	Moved to a different location/ caregiver not available	Not consented / left the study	incomplet e	l	%
Ridigama	98	09	00	04	03	16	114	85.96
Chankanai	234	13	31	19	03	66	300	78.00
Karachchi	214	10	38	17	01	66	280	76.43
Total	546	32	69	40	07	148	694	78.67

PILOT OF THE ENDLINE ASSESSMENT (ADAPTED SURVEY INSTRUMENT)

The pilot study was conducted from the 12th to the 20th of June, 2020. Each enumerator was allocated 5 participants (from Chankanai or Ridigama) to conduct telephone interviews during this period. The selection of participants for the pilot was based on the availability of contact numbers. In Kurunegala the pilot study recruited participants from both study arms, whereas for the North the contact numbers were available for the intervention arm only.

There were a number of observations that were made by the enumerators and research assistants during this stage of data collection. The observations and adaptations are indicated below. All participants in the pilot study were rewarded with Rs. 100 as a phone reload to a contact number provided by the caregiver. Of the 35 participants selected for the pilot study only 30 were conducted. The data obtained through the pilot study are analyzed along with the data obtained through the main study.

- Some caregivers were not contactable through the contact numbers provided by WVL. The enumerators reported that the phones were switched off, incorrect or not responding. Therefore, the research team decided to involve leader mothers, volunteers or facilitators to assist the enumerators to contact the caregivers during the main study.
- The interview lasted for an average of 80 minutes; however, no items from the endline questionnaire were deleted as the questionnaire had to assess the primary and secondary outcomes of the study (child development, maternal mental health and caregiver practices).
- A pilot study could not be conducted in Karachchi as the contact numbers were not provided by WVL during the time of the pilot study.
- When conducting the CREDI questionnaire, the participants did not have the reference pictures. Therefore, the team from WVL and University of Kelaniya made arrangements to deliver the reference pictures to the homes of all the participants prior to commencing the endline study.

FINAL EVALUATION AND FINDINGS

The data collection for the main study was carried out from the 25th of June to the 2nd of August, 2020. On average, the enumerators conducted 4 interviews per day. Since caregivers were not always contactable, volunteers who work with WVL were given the task of organizing appointments to conduct the telephone interviews. However, the productivity of data collection

was grossly impacted by the lack of connectivity to the caregivers or the volunteers allocated to the area. The average time for a telephone interview reduced to 50 minutes through practice gained by the enumerators as a result of repeated administration.

RELIABILITY OF THE MEASUREMENTS

Selected questions in the caregiver questionnaire such as the Brigance, child protection, responsive feeding, PHQ-9, WEMWB, were re-administered to 64 participants. These questionnaires were selected because the responses were valid for a 2 week period. The re-test was conducted within a 7 to 14 day period of the initial interview through a 20 minute telephone interview.

For PHQ-9 scale the correlation between the test and retest scores were low (Spearman $r=0.405$, $p=0.001$, ICC =0.493, $p=0.002$). The consistency for PHQ- 9 is low. For WEMWBS the correlation was moderate (Spearman $r=0.652$, $p<0.001$, ICC , 0.665, $p<0.001$) which means the responses were moderately consistent between the test and retest.

In order to assess the impact of difference in data collection method, CREDI was readministered to 74 children, randomly selected from both the intervention and control groups. The correlation between the raw scores obtained by telephone interview method and face-to-face interview was moderate for all domains (Motor -Pearson $r=0.669$, $p<0.001$; Cognitive- Pearson $r=0.618$, $p<0.001$); Language- Pearson $r=0.669$, $p<0.001$; Social-Emotional -Pearson $r= 0.656$, $p<0.001$). The correlation between the overall scores were satisfactory (Pearson $r= 0.704$, $p<0.001$). which means the responses were moderately consistent the two testing methods (telephone vs face to face interview). The change in the interview method will not have a significant impact on the responses given by caregivers.

ETHICS APPROVAL

Since the proposed method and timeline of the study were impacted due to COVID 19, a request for an amendment was submitted to the Ethics Review Committee (ERC) of the Faculty of Medicine, University of Kelaniya and to the Sri Lanka Clinical Trial Registry (SLCTR). Annexures and B includes the letters/evidence of approval obtained.

ENDLINE ASSESSMENT- QUALITATIVE STUDY

METHOD

This section of the study is based on thematic analysis of qualitative data analysis. Themes were derived after identifying patterns of meaning across the transcribed interviews. Patterns were identified through a rigorous process of data familiarisation, data coding, and theme development and revision.

The study was developed in two stages; the semi structured interview schedule was developed during the first phase. In the second phase, individual semi-structured interviews (SSI) and Focus Group Discussions (FGD) were conducted to address the research questions of the present study. The entire study was carried out between 15th of September, 2020 and 22nd of December 2020. The details of each phase are given below.

PHASE 1

The semi structured interview guide was developed by the research assistants for in-depth interviews and focus group discussions. This interview guide was then reviewed and edited by a qualitative expert who is a consultant on this research project from UoK. The edited interview guides were then translated into Sinhala and Tamil to ensure that there will be consistency in the interviews guides when conducting the focus group discussion in the local languages.

PHASE 2

Four in depth interviews and eleven FGDs were conducted from 21st of September, 2020 to the 28th of September, 2020.

-Stakeholder interviews (Mentors, trainers and research assistant)

Three of the stakeholder interviews were conducted through a Zoom meeting which was recorded while one was conducted face to face. These interviews were conducted by the research assistants. These stakeholders were selected to be interviewed as they worked closely on the project.

-Interviews conducted in Ridigama

The FGDs in Ridigama were conducted on the 28th of September, 2020. One research assistant of the project moderated the discussion while the other was involved in note taking. These interviews were conducted face to face in groups. Interviewers were conducted with caregivers who attended more than 80% of the GBG sessions, caregivers who attended 25% to 80% GBG sessions and below. The details on the allocation of groups are included in Table 4.

-Interviews conducted in the North

As the interviews in the North had to be conducted in Tamil, a Tamil speaking graduate was recruited. She was trained on how to conduct FGD by qualitative expert. The research assistants were also present with her and engaged in note taking during the FGD. These interviews were conducted face to face in groups. The details on the allocation of groups are included in Table 4. The interviews in Chankanai were conducted on the 22nd of September while the interviews in Karachchi were conducted on the 23rd of September, 2020.

Table 4: Study area and number of Focus group interviews conducted

Study area	FGD with caregivers	FGD with facilitators
Ridigama	3	1
Chankanai	3	1
Karachi	2	1

ETHICS APPROVAL

This section presents the results of the second phase. Ethics approval for this qualitative study was obtained through a proposal submitted for a process evaluation. The ERC approval letter is attached in Annexure E.

PARTICIPANTS AND RECRUITMENT

Through a purposive sampling approach, as described by Green and Thorogood (2018), caregivers of the intervention group with a varied percentage of attendance were selected to ensure the presence of variability within the data. Furthermore, all facilitators and all

stakeholders involved in implementation were included. Details of the participants is a given below in Table 5.

Table 5: Participants of qualitative study

Type of participant	Gender		Participants per area			Total of participants
	Male	Female	Chankanai	Karachchi	Ridigama	
Caregivers with over 80% attendance for GBG sessions	0	37	15	13	9	37
Caregivers having 25% to 80% attendance for GBG sessions	1	26	13	7	7	27
Caregivers having less than 25% attendance for GBG sessions	0	16	4	–	6	10
Facilitators	0	22	11	6	5	22
Stakeholders (Mentors, trainers and research assistant)	2	2	3		1	4

DATA COLLECTION

All FGDs and in-depth interviews were audio recorded on two recording devices. However, the contents of 2 interviews of Karachchi could not be transcribed because of the background noise that took place during the interview. Each interview was approximately 45 minutes in length.

DATA ANALYSIS

-PROCESS OF TRANSCRIPTION AND TRANSLATION

After the two research assistants listened to the interviews conducted in English for the purpose familiarization, the interviews were transcribed. The interviews in Sinhala were translated and transcribed by the research assistants. The interviews conducted in Tamil were translated and transcribed by the moderator of the interviews.

Almost all the interviews contained few short sections of conversation that were not related to the interview questions and these sections of the interview were not included in the transcribed document. Furthermore, fillers in speech (e.g.- ummm, ugh...ah) and false starts were also not included in the transcribed and translated document unless it was essential to the context of what was stated.

Five FGD were conducted in Sinhala, six were conducted in Tamil and three were conducted in English. On average, a 30 minutes recording required about 2 hours to be translated and transcribed. The transcribed interviews were approximately 6- 8 pages, single spaced in length.

-PROCESS OF THEMATIC ANALYSIS

The transcribed interviews were analyzed using Thematic Analysis described by Braun and Clark (2006). The six phases of thematic analysis were carried out to arrive at the themes.

During the initial stage of the thematic analysis process, the research assistant familiarized herself with the data by reading the transcribed data 1-2 times. Using the interviews, preliminary codes were identified paying close attention to reoccurring ideas in the interviews. This process was carried out by the research assistant under the supervision of a qualitative research expert. These recurring ideas comprised themes. These themes were closely examined to ensure that the responses were categorized under the most appropriate theme. Finally, sub- themes were identified within the main themes. Four themes were derived from the transcribed data.

REFLEXIVITY

Reflexivity is defined as the idea that, researchers inevitably bring their experiences, values and prior knowledge to their research (Pillow, 2003). Researchers' preconceived ideas about the area of study or the participants whom they are studying may affect the conduct of the study or the

interpretation of the results. Therefore, it is important that researchers being aware of their preconceptions when designing a study, when interacting with participants, interpreting results, and writing about the project. The data was collected and analyzed by two research assistants. In particular, the research assistants assume that their different backgrounds and experience in research implementation might have influenced their perspective, and subsequently, their analyzes. Since the research assistants are independent evaluators of the project the analysis is likely to have delivered unbiased efficient results.

RESULTS OF THE QUANTITATIVE STUDY

The final endline sample in the database consisted of 542 caregiver-child dyads. Table 6 shows the response and dropout rate for intervention and control areas of the study.

Table 6: Endline assessment summary according to the study group

Area	complete interviews	Incomplete interviews	Total	Response %	Drop-out Rate %
Control	223	88	311	71.7	28.3
Intervention	323	60	383	84.3	15.7
Total	546	148	694	78	22

The ages of the children in the final sample ranged from 18 to 41 months. There was no significant difference between the mean age of the children in the control (28.27 ± 5.69) and intervention (27.39 ± 5.47) groups ($t=1.831$, $p=0.068$). The sexes were distributed equally in the intervention and control groups ($\chi^2_1=2.241$, $p=0.134$).

FEEDING PRACTICES

BREASTFEEDING

When questioned whether the babies had been exclusively breast fed up to 6 months at baseline, 55% of intervention caregivers and 61% of control group caregivers responded as “yes” ($\chi^2_1=2.061$, $p=0.151$, Control group CI= 0.94 ± 0.026 [0.92,0.97] , Intervention group CI= 0.95 ± 0.022 [0.93, 0.97]). Refer Table 7.

Table 7: Exclusive Breastfeeding of the child (did you exclusively breast feed your child from 0- 6 months?)

Response	Intervention		Control		Significance (p-value)	
	Baseline N(%)	Endline N(%)	Baseline N(%)	Endline N(%)	Baseline comparison between intervention and control	Endline comparison between intervention and control
Yes	199 (55.1)	-	182 (60.7)	-	($\chi^2_1 = 2.061$ (p=0.151))	-
No	162 (44.9)	-	118 (39.3)	-		

Table 8 refers to the proportion of children who were breastfed the previous day. At baseline, the proportion of children who were breastfed the previous day was similar in the two study areas ($\chi^2_1 = 0.287$, $p=0.592$, Control group CI= 0.94 ± 0.026 [0.92,0.97] Intervention Group CI= 0.95 ± 0.022 [0.93, 0.97]). At endline, a significantly higher percentage of children in the intervention group was breastfed the previous day as compared to children from the control group (72.7% vs 61.3%) ($\chi^2_1 = 7.912$; $p=0.005$, Control Group CI= 0.61 ± 0.064 [0.55,0.67] Intervention Group CI= 0.72 ± 0.049 [0.68,0.77]).

Table 8: Breastfed yesterday (did you breast-feed your child yesterday?)

Response	Intervention	Control		Significance (p-value)		
		Endline N(%)	Baseline N(%)	Endline N(%)	Baseline comparison between intervention and control	Endline comparison between intervention and control
Yes	346 (95.6)	232 (72.7)	285 (94.7)	136 (61.3)	$\chi^2_1 = 0.287$ (p=0.592)	$\chi^2_1 = 7.912$ (p=0.005)
No	16 (4.4)	87 (27.3)	16 (5.3)	86 (38.7)		
No	0 (0.0)	70 (32.1)	01 (5.6)	73 (45.9)		

At endline, there was a significantly higher proportion of children over 24 months being breastfed in the intervention group as compared to the control group (94.4% vs 54.1%, $\chi^2_1 = 7.439$, $p=0.006$, Control CI= 0.54 ± 0.077 [0.46,0.62] Intervention Group CI= 0.67 ± 0.074 [0.60,0.75]). Refer Table 9.

Table 9: Breastfeeding after 24 months

Response	Intervention		Control		Significance (p-value)	
	Baseline N(%)	Endline N(%)	Baseline N(%)	Endline N(%)	Baseline comparison between intervention and control	Endline comparison between intervention and control
Yes	10 (100.0)	148 (67.9)	17 (94.4)	86 (54.1)	Fisher's exact test, $p<0.001$	$\chi^2_1 = 7.439$ ($p=0.006$)
No	0 (0.0)	70 (32.1)	01 (5.6)	73 (45.9)		

MINIMUM ACCEPTABLE DIET

MINIMUM DIETARY DIVERSITY (MDD) AND MINIMUM MEAL FREQUENCY

The food items the child was fed during the past 24 hours were categorized into seven categories namely cereals, legumes and seeds, milk and milk products, meat products, eggs, vitamin A rich fruits and vegetables and other fruits and vegetables. Consumption of at least four or more of the above food groups was considered as fulfilling minimum dietary diversity. Table 10 describes the percentages of children who fulfilled minimum diversity criteria at endline and baseline in the two groups. At baseline the fulfillment of MDD was different between the two study groups ($\chi^2_1 = 11.511$, $p=0.001$); a higher proportion of children in the intervention group (41.9%) had not met the minimum requirements as compared to the control group (29.3%). However, at endline, the percentage of children who fulfilled minimum dietary diversity criteria was significantly higher in the intervention group (98.1%) as compared to the control group (93.7%) ($\chi^2_1 = 7.201$, $p=0.007$). This is a marked improvement from the baseline situation. Based on the proportions at endline, both the intervention and control groups have improved in terms of fulfilling the MDD of the children. (Table 10).

Table 10: Minimum dietary diversity

Response	Intervention		Control		Chi square test (p value)	
	Baseline N (%)	Endline N (%)	Baseline N (%)	Endline N (%)	Baseline comparison between intervention and control	Endline comparison between intervention and control
Yes	218 (58.1)	313 (98.1)	217 (70.7)	208 (93.7)	$\chi^2_1 = 11.511$ (0.001)	$\chi^2_1 = 7.201$ (0.007)
No	157 (41.9)	06 (1.9)	90 (29.3)	14 (6.3)		

Table 11 and 12 shows the change in minimum dietary diversity status at end line compared to the baseline situation. In the control group, 89.1% (49 out of 55) of children who did not fulfill

MDD criteria at baseline, had this requirement fulfilled at endline ($p<0.001$) (Table 11). Similarly, in the intervention group, 98.5% of children who did not fulfill MDD criteria at baseline had achieved MDD criteria at endline ($p<0.001$) (Table 12).

Table 11: Endline MDD in control group by baseline classification

Endline					McNemar Test
		MDD < 4 categories	MDD \geq 4 categories	Total	
Baseline	MDD < 4 categories	06 (10.9)*	49 (89.1)	55 (100)	$p<0.001$
	MDD \geq 4 categories	07 (4.2)	159 (95.8)	166 (100)	
	Total	13	208	221	

Table 12: Endline MDD in intervention group by baseline classification

Endline					McNemar Test
		MDD < 4 categories	MDD \geq 4 categories	Total	
Baseline	MDD < 4 categories	02 (1.5)*	128 (98.5)	130	$p<0.001$
	MDD \geq 4 categories	04 (2.2)	179 (97.8)	183	
	Total	06	307	313	

Table 13 shows the minimum meal frequency (MMF) of children of the intervention and control groups at endline. There was no significant difference in the proportion of children with appropriate MMF between intervention and control group either at baseline ($\chi^2_1 = 0.082$, $p=0.774$, Control Group, $CI=0.71 \pm 0.055$ [0.65, 0.76], Intervention Group, $CI=0.72 \pm 0.048$ [0.67, 0.77]) or at endline ($\chi^2_1 = 0.847$, $p=0.357$, Control group, $CI= 0.55 \pm 0.065$ [0.48, 0.61], intervention

Group, CI = 0.59 ± 0.054 [0.53,0.64]). Within each group, the proportion of children who had minimum meal frequency at endline (control 55%, intervention 58.9%) had decreased from baseline (control 71.1%, intervention 72.2%) (Table 12). Higher proportion of children in the intervention group (58.9 %) have achieved MMF compared to the control group (55%) at endline although the difference is not significance.

Table 13: Minimum meal frequency

Response	Intervention		Control		Chi square test (p value)	
	Baseline N (%)	Endline N (%)	Baseline N (%)	Endline N (%)	Baseline comparison between intervention and control	Endline comparison between intervention and control
Yes	236 (72.2)	188 (58.9)	182 (71.1)	122 (55)	$\chi^2_1 = 0.082$ (0.774)	$\chi^2_1 = 0.847$ (0.357)
No	91 (27.8)	131 (41.1)	74 (28.9)	100 (45)		

RESPONSIVE FEEDING

The scale used to assess responsive feeding is a combination of items from different scales/questionnaires (Musher-Eizenman & Holub, 2007; Vazir et al., 2013). The same scale was used in the baseline and endline assessments. The scale consists of 13 items regarding attitudes and feeding practices followed by caregivers. For items ‘My child should always eat all of the food on his/her plate’, ‘If my child says, ‘I’m not hungry,’ I try to get him/her to eat anyway’ and ‘If my child eats only a small helping, I try to get him/her to eat more’ were coded in a way that choosing ‘strongly disagree’ would result in 5 marks and for rest of the items choosing “strongly agree’ would result in 5 marks.

The scale is yet to be validated for construct validity. Therefore, a total score cannot be obtained for this scale. Hence, responses for each item at baseline and endline in the two study groups is given (Annexure F). All responses to the 13 questions are represented from Figure 4 - 16.

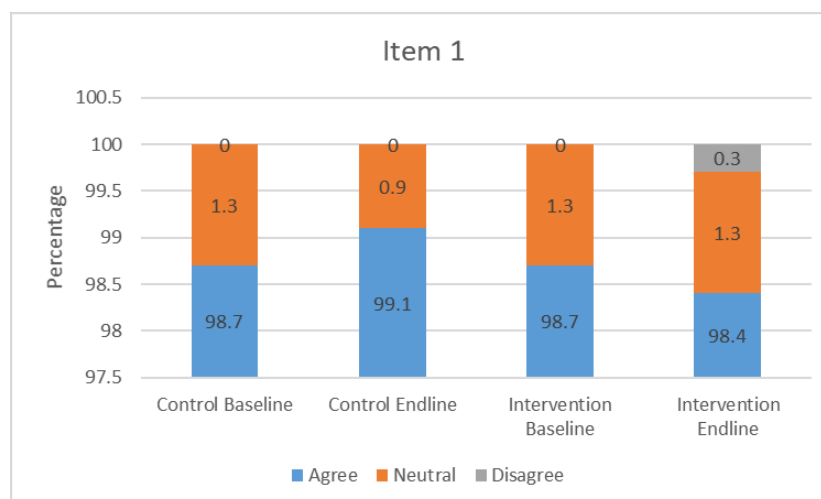


Figure 4: It is important to smile and look at the infant's face while feeding

There was no significant difference between the control and intervention group at endline (Fisher's exact 0.809, $p=1.000$) (Figure 4).

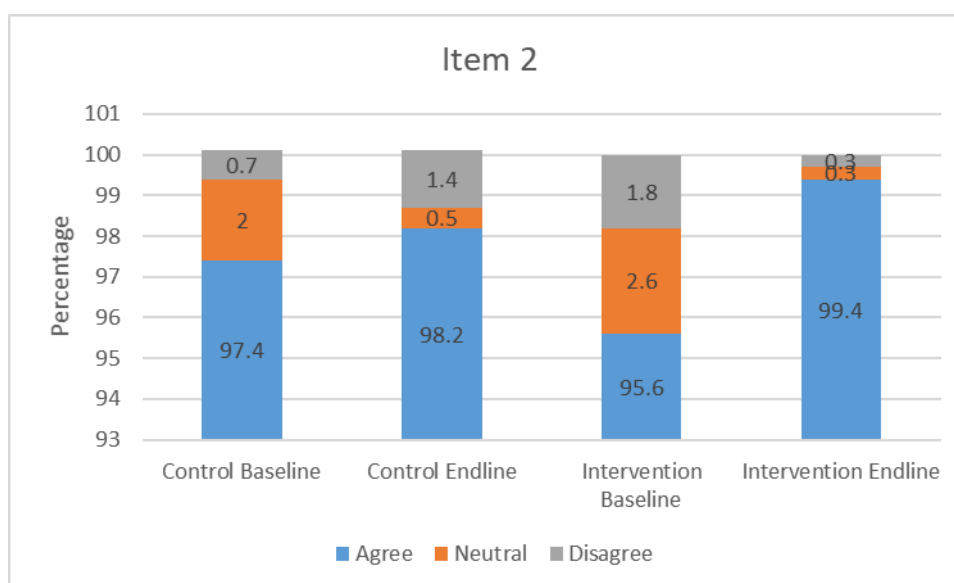


Figure 5: Teach the child to eat patiently and lovingly

There was no significant difference between the control and intervention groups at endline (Fisher's exact test 2.176, $p=0.426$) (Figure 5).

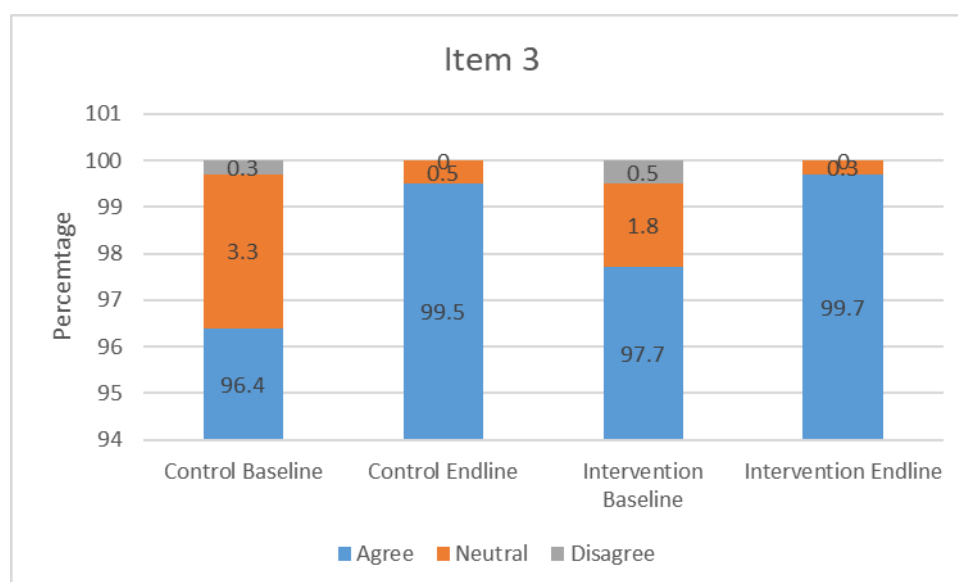


Figure 6: Actively help the child to eat

There was no significant difference between the intervention and control group at endline (Fisher's exact test, $p=1.00$) (Figure 6).

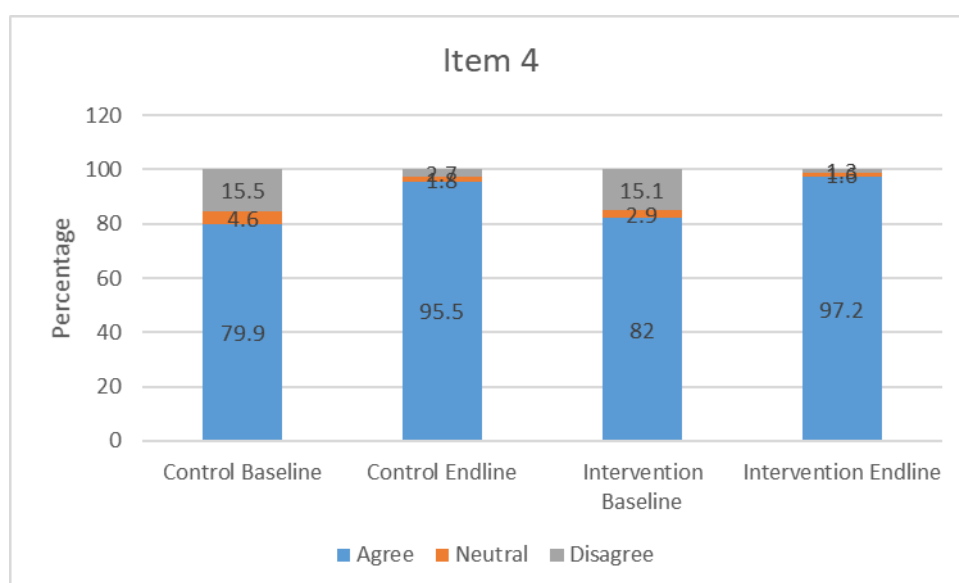


Figure 7: Help the child but do not use physical restraint while feeding

There was no significant difference between the intervention and control group at endline (Fisher's exact test 1.654, $p=475$) (Figure 7).

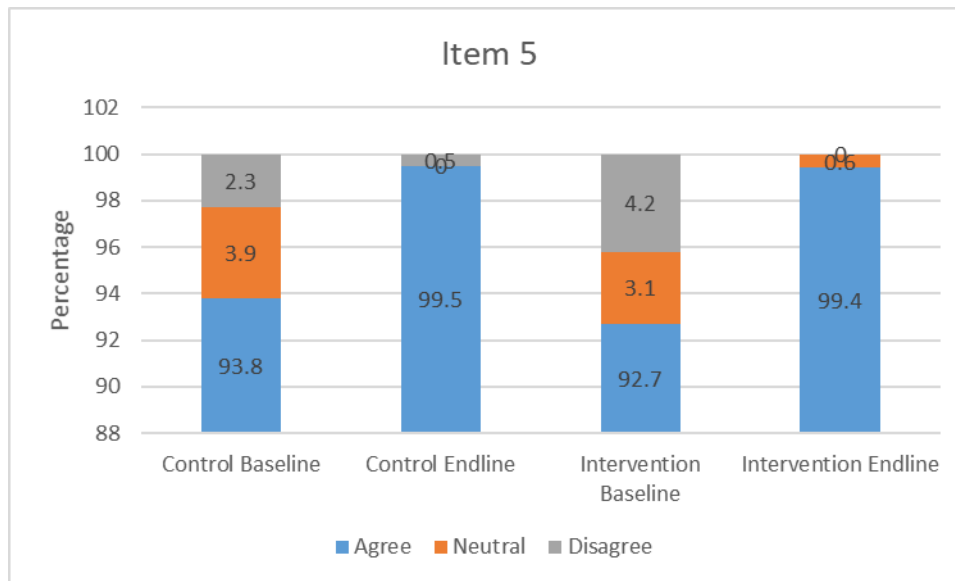


Figure 8: Praise / encourage child to eat and give positive comments

There was no significant difference between the intervention and control group at endline (Fisher's exact test= 2.364, $p=0.311$) (Figure 8).

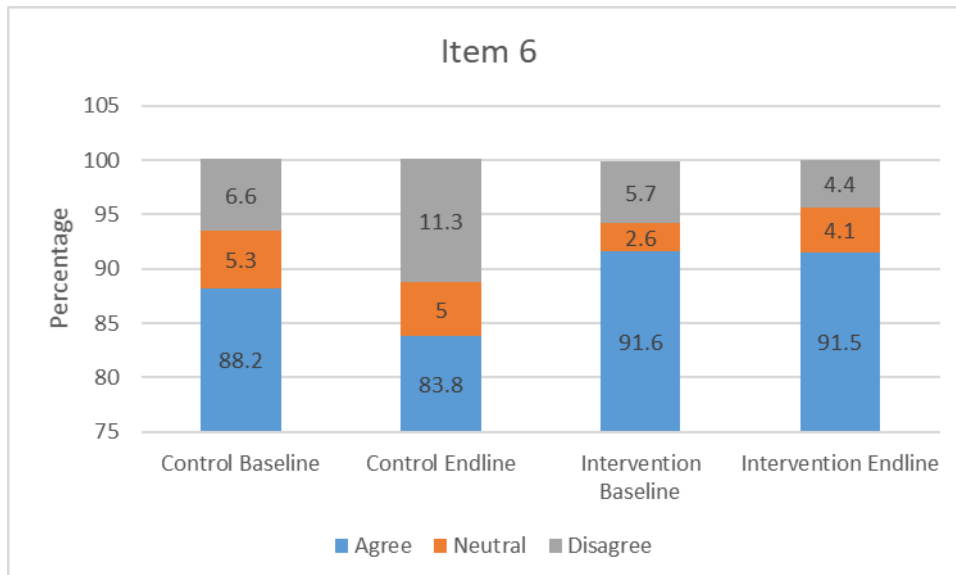


Figure 9: Respond to child refusal by waiting and offering one more bite

There was no significant difference between the intervention and control group at endline. However, in both groups, a significantly higher proportion of caregivers agreed with this item as compared to the proportion who disagreed ($p<0.01$) (Figure 9).

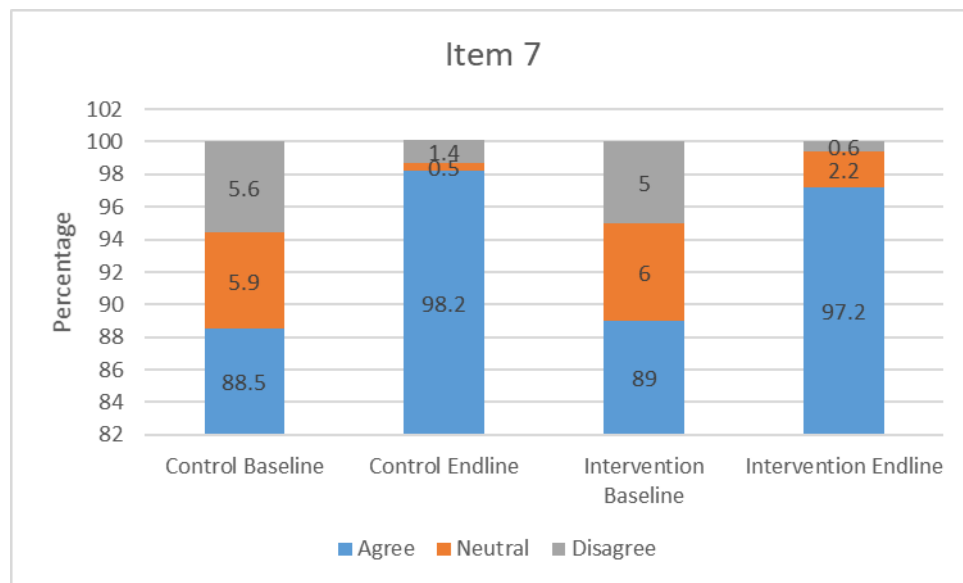


Figure 10: Encourage experience with self-feeding or give finger foods

There was no significant difference between the intervention and control group at endline (Fisher's exact test= 3.359, $p=0.219$) (Figure 10).

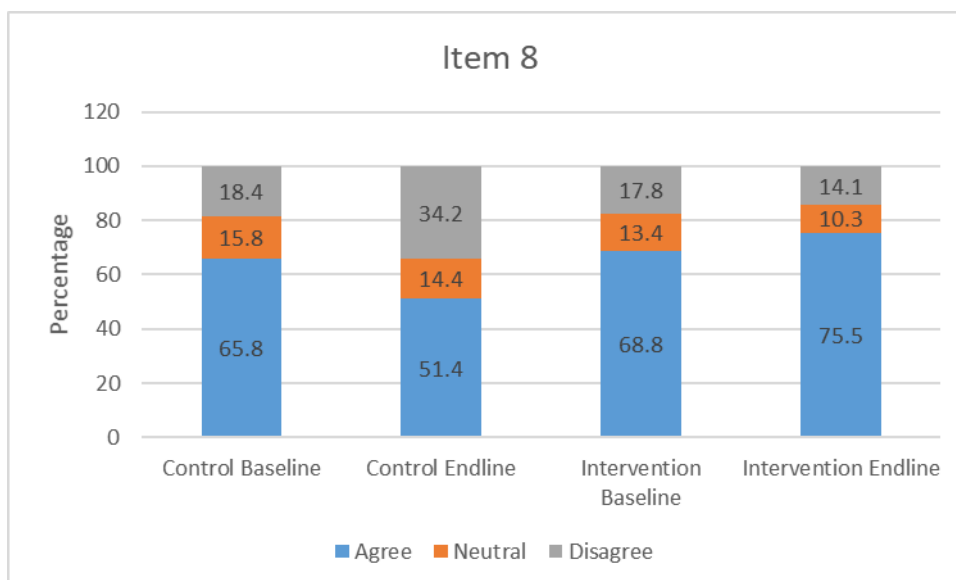


Figure 11: My child should always eat all of the food on his/her plate.

There was no significant difference between the intervention and control group at endline. However, in both groups, a significantly higher proportion of caregivers agreed with this item

as compared to the proportion who disagreed ($\chi^2_2=37.195$, $p<0.001$). There was no difference between disagreement and neutral response rate (Figure 11).

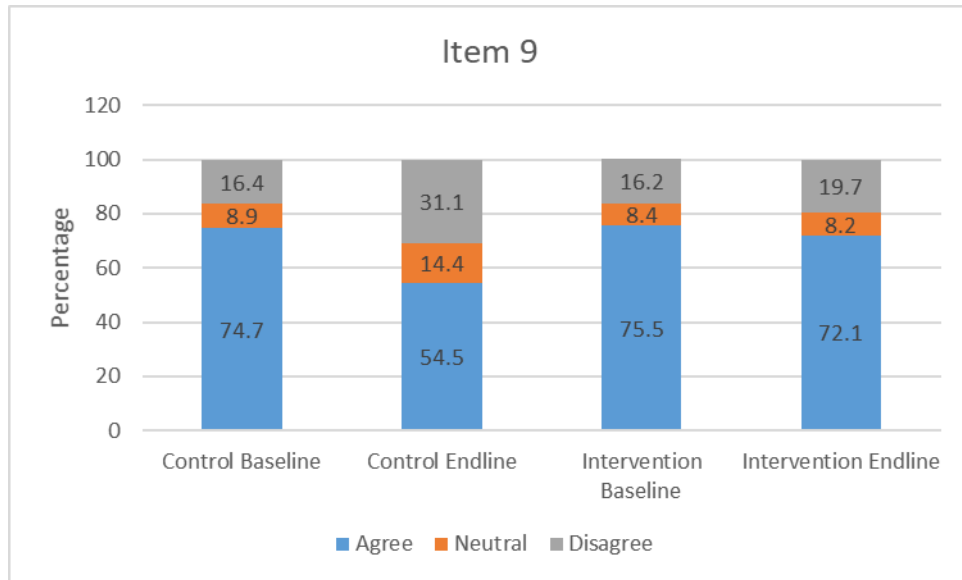


Figure 12: If my child says, “I’m not hungry,” I try to get him/her to eat anyway.

There was no significant difference between the intervention and control group at endline. However, in both groups, a significantly higher proportion of caregivers agreed with this item as compared to the proportion who disagreed ($\chi^2_2=17.927$, $p<0.001$). There was no difference between disagreement and neutral response rate (Figure 12).

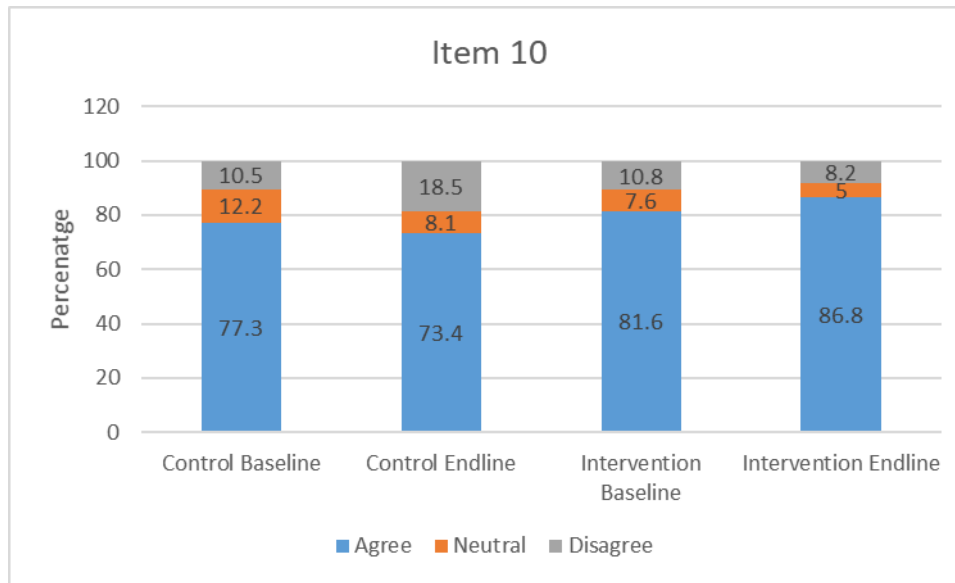


Figure 13: If my child eats only a small helping, I try to get him/her to eat more.

There was no significant difference between the intervention and control group at endline. However, in both groups, a significantly higher proportion of caregivers agreed with this item as compared to the proportion who disagreed ($\chi^2_2=16.139$, $p<0.001$). There was no difference between disagreement and neutral response rate or agreement and neutral response (Figure 13).

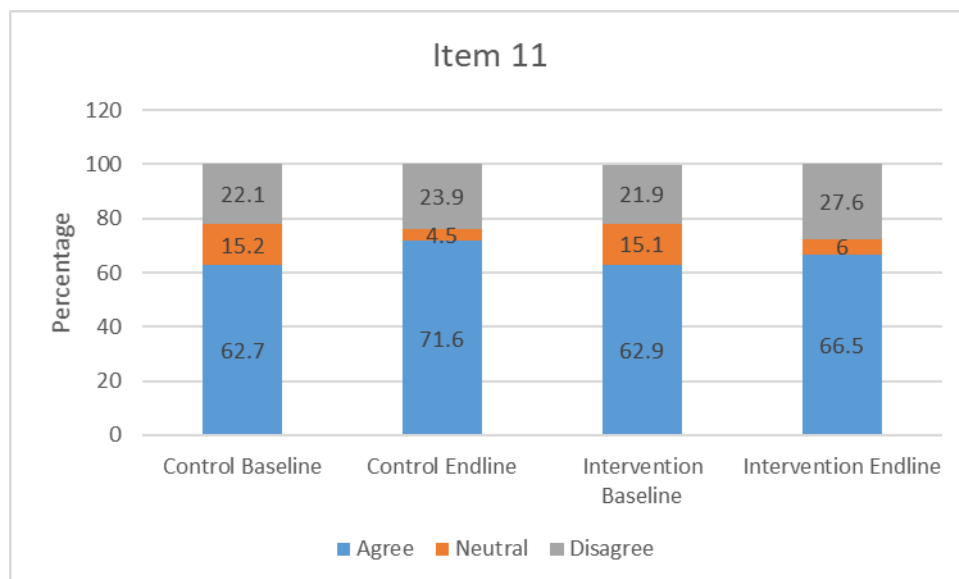


Figure 14: If I did not guide or regulate my child's eating, s/he would eat too much of his/her favourite foods.

There was no significant difference between the intervention and control group at endline ($\chi^2_2=1.716$, $p=0.427$) (Figure 14).

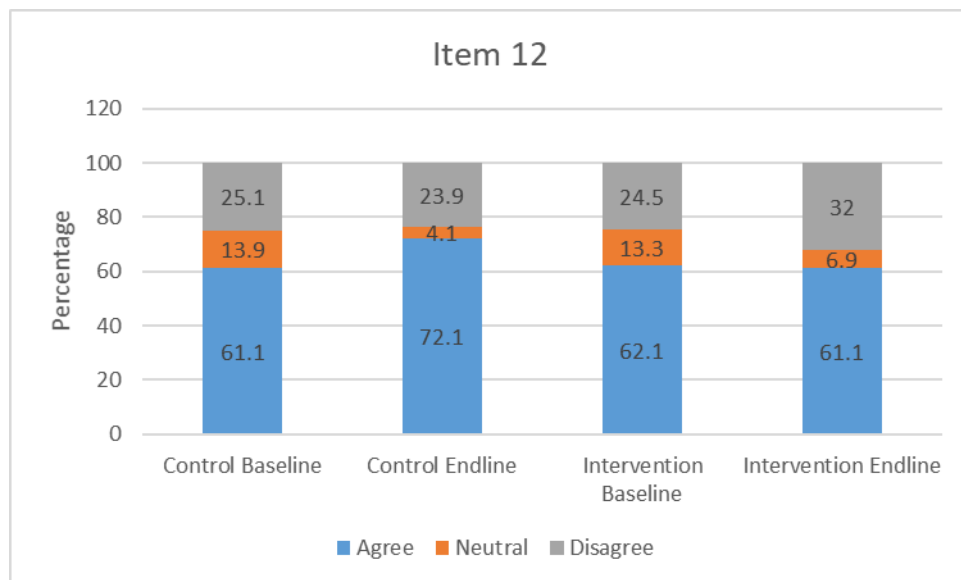


Figure 15: If I did not guide or regulate my child's eating, he/she would eat too many junk foods.

There was no significant difference between the intervention and control group at endline. However, in both groups, a significantly higher proportion of caregivers agreed with this item as compared to the proportion who disagreed ($\chi^2_2=7.233$, $p<0.05$). There was no difference between disagreement and neutral response rate or agreement and neutral response (Figure 15).

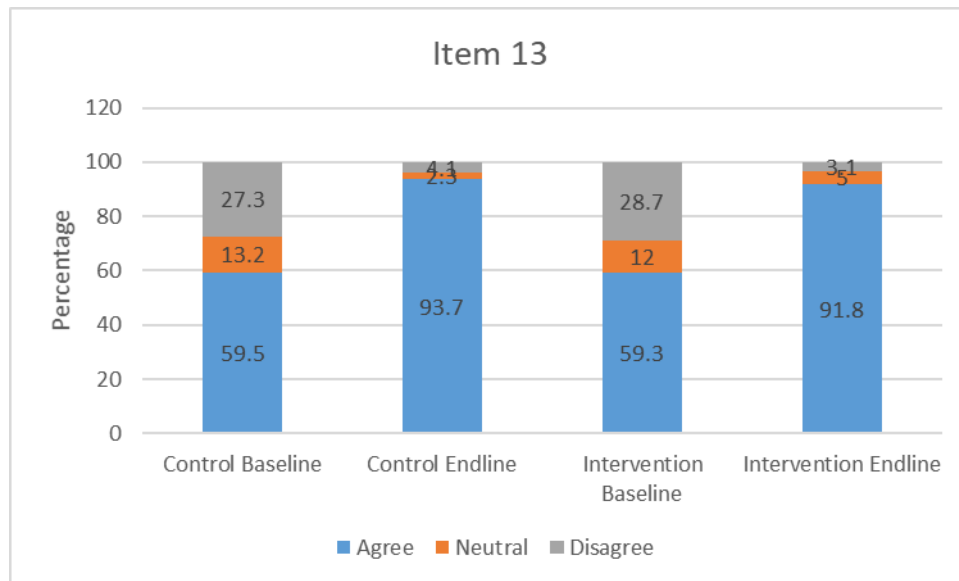


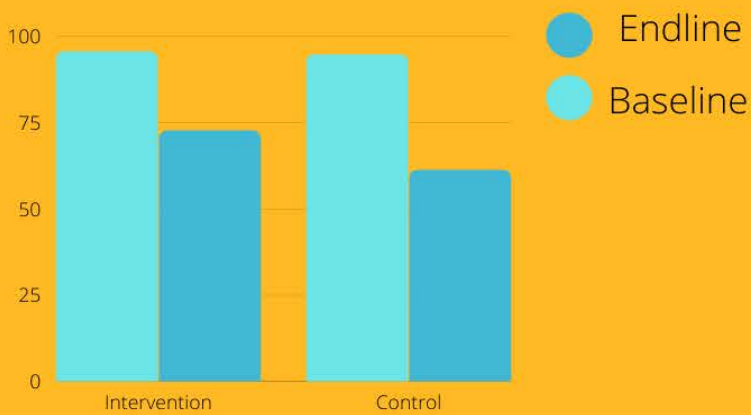
Figure 16: I have to be sure that my child does not eat too much of his/her favourite foods.

There was no significant difference between the intervention and control group at endline ($\chi^2_2 = 2.938$, $p=0.224$) (Figure 16).



Feeding Practices

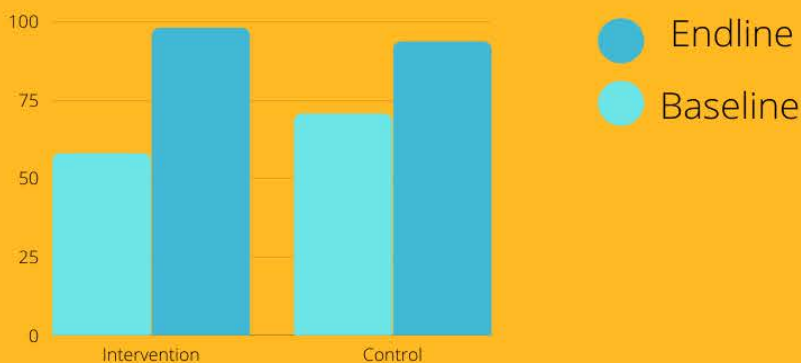
Breast feeding



Higher proportion of children in the intervention group continue to be breastfed beyond six months **

**p<0.01

Minimum Dietary Diversity



Higher proportion of children in the intervention group have minimum dietary diversity in the meals **

**p<0.01



HEALTH PROTECTION

The number of children having diarrhoea, cough and fever within the past two weeks from the interview as reported by their caregivers was higher at endline compared to baseline in both intervention and control groups.

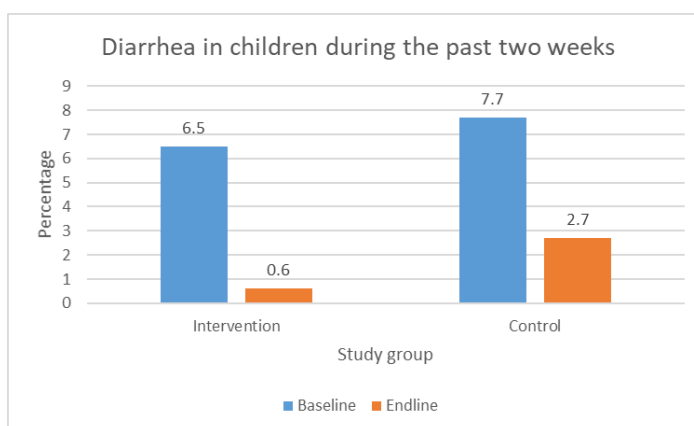


Figure 17: Diarrhoea in children during the past two weeks

Both groups show a decrease in the number of children who had diarrhoea during the past two weeks at endline. Also, the number of children in the intervention group who had diarrhoea is lower than that of the control group. However, there was no significant association between having diarrhoea and the study group (Fisher's exact test, $p = 0.071$) (Figure 17).

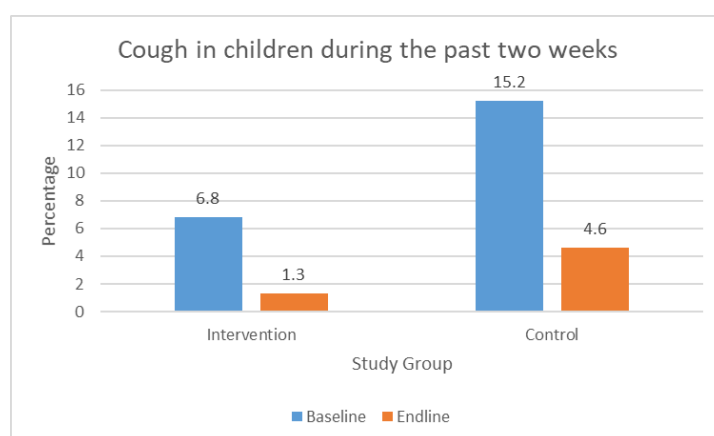


Figure 18: Cough in children during the past two weeks

Both groups show a decrease in the number of children who had cough during the past two weeks at endline. Also, the number of children in the intervention group who had cough is lower than that of the control group. A significantly higher proportion of children did not have cough at endline in both groups (Fisher's exact test, $p = 0.071$). However, there was no significant difference between the children who have cough between the study groups (Figure 18).

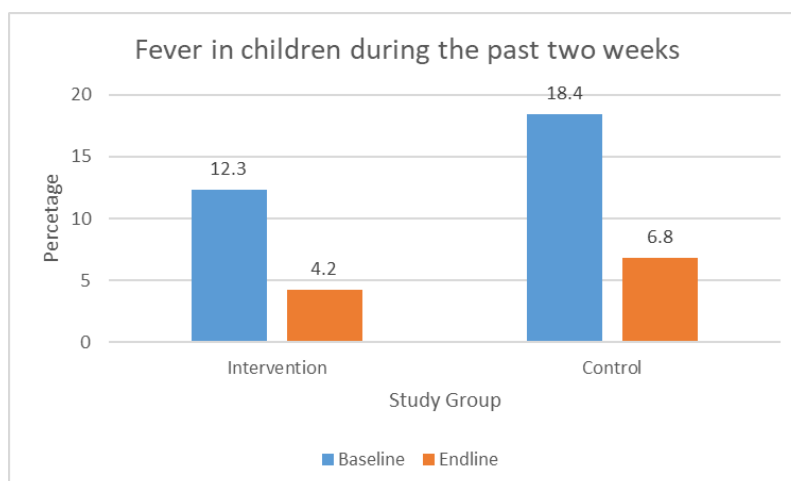


Figure 19: Fever in children during the past two weeks

Both groups show a decrease in the number of children who had fever during the past two weeks at endline. Also, the number of children in the intervention group who had fever is lower than that of the control group. However, there was no significant association between having fever and the study group ($\chi^2_1=1.854$, $p=0.236$) (Figure 19).

CHILD STIMULATION PRACTICES

Child stimulation was assessed based on the frequency of engaging with the child within the past three days based on six activities; reading to the child, storytelling, singing to the child, taking the child out for a walk, playing with the child and naming objects together.

READING

Table 14 shows a comparison of “reading to the child” between the intervention and the control groups at baseline and endline. Compared to the control group, a higher proportion of caregivers in the intervention group read to their children at baseline and at endline.

Table 15 gives percentages of those who retained the baseline practice of reading and those who began/discontinued the baseline behaviour at endline. In both the intervention (73.1%) and control (65.4%) a higher proportion of caregivers continued reading to their children at endline (intervention 93.9%, 92.2%) (Table 15).

Table 14: Comparison of reading to the child between the intervention groups and the control group at baseline and endline

Reading to child	Intervention		Control		Chi square test (p value)*	
	Baseline N (%)	Endline N (%)	Baseline N (%)	Endline N (%)	Baseline comparison between intervention and control	Endline comparison between intervention and control
Yes	280 (73.1)	287 (92.0)	202 (65.4)	190 (86.0)	$\chi^2_1 = 4.841$ (0.028)	$\chi^2_1 = 4.977$ (0.026)
No	103 (26.9)	25 (8.0)	107 (34.6)	31 (14.0)		

*comparison between the intervention and the control group

Table 15: Comparison of reading to children at endline by baseline and group

Study Group		Endline			p-value based on McNemar Test
		Reading N (%) *	Not reading N (%) *	Total N (%) *	
Intervention					<0.001
Baseline	Reading	217 (93.9)	14 (6.1)	231 (100)	
	Not Reading	70 (86.4)	11 (13.6)	81 (100)	
Control					<0.001
Baseline	Reading	141 (92.2)	12 (7.8)	153 (100)	
	Not Reading	49 (73.1)	18 (26.9)	67 (100)	

* Within baseline percentage of caregivers continuing with a practice as a percentage of caregivers who were doing the practice at baseline

The caregivers in the intervention group are 3.28 times more likely to read to the child at endline as compared to the caregivers in the control group, after controlling for reading habits at baseline. (p=0.058)

STORYTELLING

Table 16 shows the comparison of storytelling to the child between the intervention groups and the control group. At baseline, a significantly higher proportion of caregivers in the intervention group told stories to children as compared to caregivers of the control group ($p=0.029$).

Table 17 gives percentages of those who retained the baseline practice of storytelling and those who began/discontinued the baseline behaviour at endline. Compared to the control group, a higher percentage of caregivers in the intervention group engaged in storytelling at endline ($p=0.058$). Although not statistically significant, compared to the control group, a higher percentage of caregivers in the intervention group who did not engage in storytelling to children at baseline had started the activity at endline (Table 17).

Table 16: Comparison of storytelling to the child between the intervention and the control groups at baseline and endline

Storytelling	Intervention		Control		Chi square test (p value)*	
Response	Baseline N (%)	Endline N (%)	Baseline N (%)	Endline N (%)	Baseline comparison between intervention and control	Endline comparison between intervention and control
Yes	346 (91.3)	291 (92.7)	258 (86.0)	195 (87.8)	$\chi^2_1 = 4.774$ (0.029)	$\chi^2_1 = 3.598$ (0.058)
No	33 (8.7)	23 (7.3)	42 (14.0)	27 (12.2)		

*comparison between the intervention and the control group

Table 17: Comparison of story-telling to children at endline by baseline and group

Study Group	Endline			p-value based on McNemar Test
	Yes	No	Total	
	N (%)*	N (%)*	N (%)*	
Intervention				

Baseline	Yes	271 (95.4)	13 (4.6)	284 (100)	0.377
	No	19 (67.9)	09 (32.1)	28 (100)	
Control					
Baseline	Yes	175 (93.6)	12 (6.4)	187 (100)	0.845
	No	14 (48.3)	15 (51.7)	29 (100)	

* Within baseline percentage

There is no difference between caregivers engaged in storytelling between the two study groups after controlling for baseline differences ($p=0.11$).

SINGING

There was no difference in the percentage of caregivers singing to children at baseline between intervention and control groups (Table 18). Table 19 gives percentages of those who retained the baseline practice of singing and those who began/discontinued the baseline behaviour at endline.

However, at endline, the percentage of caregivers in the control group who had sung to the children in the past three days had decreased making the difference in the percentages of caregivers in the intervention and controls groups becoming significant. However, there was no difference in the status of caregivers singing to children between baseline and endline in either the intervention or the control groups (Table 19).

Table 18: Comparison of singing to the child between the intervention groups and the control group

Response	Intervention		Control		Chi square test (p value)	
	Singing to the child				*	
	Baseline N (%)	Endline N (%)	Baseline N (%)	Endline N (%)	Baseline comparison between	Endline comparison between

					intervention and control	intervention and control
Yes	367 (96.8)	308 (96.9)	287 (95.3)	205 (93.2)	$\chi^2_1 = 1.006$	$\chi^2_1 = 3.960$
No	12 (3.2)	10 (3.1)	14 (4.7)	15 (6.8)	(0.316)	(0.047)

*comparison between the intervention and the control group

Table 19: Comparison of singing to children at endline by baseline and group

Study Group		Endline			p-value based on McNemar Test
		Yes N (%) *	No N (%) *	Total N (%) *	
Intervention					1.000
Baseline	Yes	300(97.7)	07 (2.3)	307 (100)	
	No	07(70.0)	03(30.0)	10 (100)	
Control					0.189
Baseline	Yes	193 (93.2)	14 (6.8)	153 (100)	
	No	07 (87.5)	01(12.5)	08 (100)	

* Within baseline percentage

The caregivers in the intervention group are 2.28 times more likely to sing to the child at end line after accounting for baseline differences ($p < 0.05$).

TAKING THE CHILD OUT FOR A WALK

At baseline, there was no difference in the proportion of caregivers taking the child out for a walk between the intervention (92.9%) and control groups (94.3%) (Table 20). At endline, a higher proportion of caregivers of children in the intervention group (83.2%) had taken their children out for a walk as compared to the control group (59.3%) ($p < 0.001$) (Table 20).

Table 21 gives percentages of those who retained the baseline practice of taking the child for a walk and those who began/discontinued the baseline behaviour at endline. In both the intervention and control groups, the percentages of caregivers taking their children out for a walk

had decreased among those who did so at baseline (Table 21); the percentage was higher in the control group as compared to the intervention group (Table 21).

Table 20: Comparison of taking the child out for a walk between the intervention and the control groups

Response	Intervention		Control		Chi square test (p value) *	
	Baseline N (%)	Endline N (%)	Baseline N (%)	Endline N (%)	Baseline comparison between intervention and control	Endline comparison between intervention and control
Yes	353 (92.9)	208 (83.2)	281 (94.3)	115 (59.3)	$\chi^2_1 = 0.540$ (0.462)	$\chi^2_1 = 31.530$ (<0.001)
No	27 (7.1)	42 (16.8)	17 (5.7)	79 (40.7)		

*comparison between the intervention and the control group

Table 21: Comparison of taking the child out for a walk at endline by baseline and group

Study Group		Endline			p-value based on McNemar Test
		Going for a walk N (%) *	Not going for a walk N (%) *	Total N (%) *	
Intervention					Intervention (0.003)
Baseline	Going for a walk	195 (85.2)	34 (14.8)	229 (100)	
	Not going for a walk	70 (86.4)	07 (35.0)	81(100)	
Control					Control (<0.001)
Baseline	Going for a walk	107 (61.8)	66 (38.2)	173 (100)	
	Not going for a walk	13 (65.0)	08 (57.1)	20 (100)	

* Within baseline percentage

The caregivers in the intervention group are 3.41 times more likely to take the child out for a walk at endline after controlling for baseline scores ($p < 0.001$).

PLAYING WITH THE CHILD

Compared to control group, significantly higher proportion of caregivers in the intervention group have played with their child at baseline (Intervention 99.7% vs Control 97.4%) and at endline (Intervention 95.6% vs Control 89.6%) (Table 22). Compared to the baseline, in both control and the intervention groups the proportion of caregivers playing with their children has decreased at endline (Table 22). The proportion of caregivers who played with their children at baseline not playing with their children at endline was higher in the control group as compared to the intervention group (7.8% vs 4.1%) (Table 23).

Table 22: Comparison of playing with the child between the intervention and the control groups

Response	Intervention		Control		Chi square test (p value)	
	Baseline N (%)	Endline N (%)	Baseline N (%)	Endline N (%)	Baseline comparison between intervention and control*	Endline comparison between intervention and control*
Yes	378 (99.7)	304 (95.6)	295 (97.4)	199 (89.6)	$\chi^2_1 = 7.302$ (0.007)	$\chi^2_1 = 7.271$ (0.007)
No	01 (0.3)	14 (4.4)	08 (2.6)	23 (10.4)		

*comparison between the intervention and the control group

Table 23: Comparison of playing with the child at endline by baseline and group

Study Group		Endline			p-value based on McNemar Test
		Yes N (%) *	No N (%) *	Total N (%) *	
Intervention					Intervention (0.002)
Baseline	Yes	302 (95.9)	13 (4.1)	315 (100)	
	No	01 (100)	00 (0.0)	01 (100)	
Control					Control (0.001)
Baseline	Yes	193 (91.5)	18 (7.8)	211 (100)	
	No	03 (37.5)	05 (62.5)	08 (100)	

* Within baseline percentage

The caregivers in the intervention group are 2.28 times more likely to play with the child at endline compared to the control group, after accounting for baseline differences ($p < 0.05$).

NAMING OBJECTS WITH THE CHILD

At both baseline and endline, the proportion of caregivers who engaged in naming objects with their children were similar in the intervention and control groups (Tables 24 and 25).

Table 24: Comparison of naming objects with the child between the intervention and the control groups at baseline and endline

Response	Intervention		Control		Chi square test (p value) *	
	Baseline N (%)	Endline N (%)	Baseline N (%)	Endline N (%)	Baseline comparison between intervention and control	Endline comparison between intervention and control
Yes	365 (96.6)	299 (94.6)	281 (94.6)	204 (91.9)	$\chi^2_1 = 1.535$ (0.215)	$\chi^2_1 = 1.596$ (0.206)
No	13 (3.4)	17 (5.4)	16 (5.4)	18 (8.1)		

*comparison between the intervention and the control group

Table 25: Comparison of naming objects with the child at endline by baseline and group

Study Group		Endline			p-value based on McNemar Test
		Yes N (%) *	No N (%) *	Total N (%) *	
Intervention					Intervention (0.307)
Baseline	Yes	217 (93.9)	14 (6.1)	231(100)	
	No	09 (81.8)	02 (18.2)	11 (100)	
Control					Control (0.230)
Baseline	Yes	287 (95.0)	15 (5.0)	302 (100)	
	No	09 (90.0)	01 (10.0)	10 (100)	

* Within baseline percentage

There is no difference in the engaging in naming activities with the child between the two groups at endline after controlling for baseline differences (p=0.263)

Based on the frequency of the above six activities, the number of interactions a child received was categorized as 0 no interaction, 1-5 interaction, 6-10 interactions and 11-18 interactions. There was no significant association between study groups and the number of interactions a child received ($\chi^2_1=7.421$; p=0.06) or endline (Fisher's Exact test; p=0.121) (Figure 20).

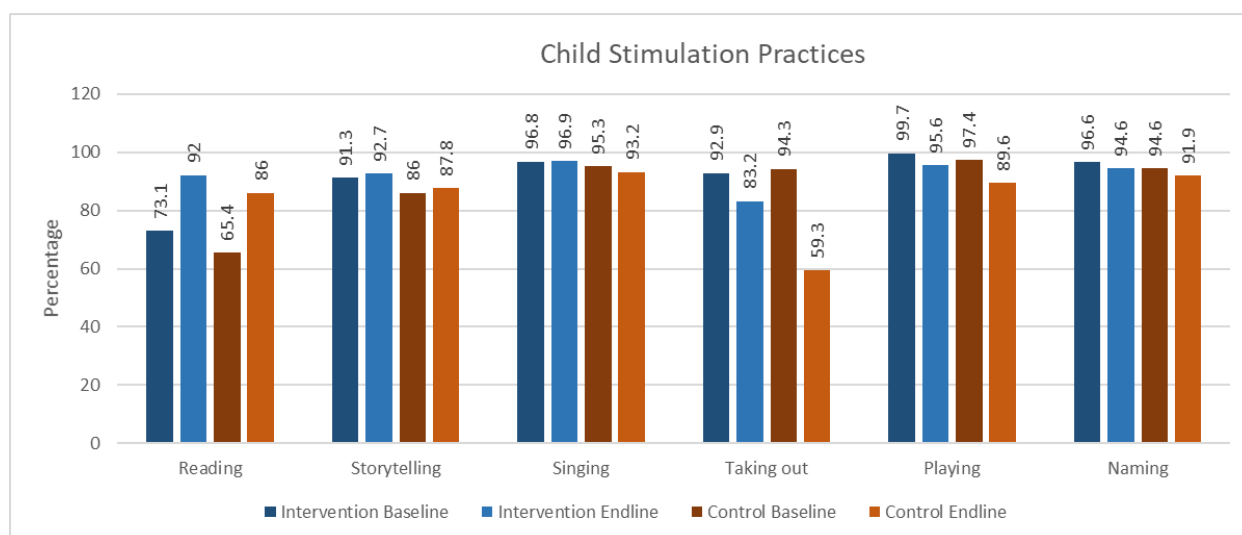


Figure 20: Comparison of child stimulation practices at baseline and endline

In the intervention group 19.3% of children had three or more books at home and at endline this number has increased to 42.6%. For the control group at baseline 21% of children had at least three books at home and at baseline the proportion was 40.1%. However, there was no significant association between owning three or more books and the study group at baseline ($\chi^2 = 3.756$; $p = 0.153$) or endline ($\chi^2 = 0.769$; $p = 0.681$). The mean number of books for the total population ($N = 542$) is 1.2 at endline (median=1) (Figure 21).

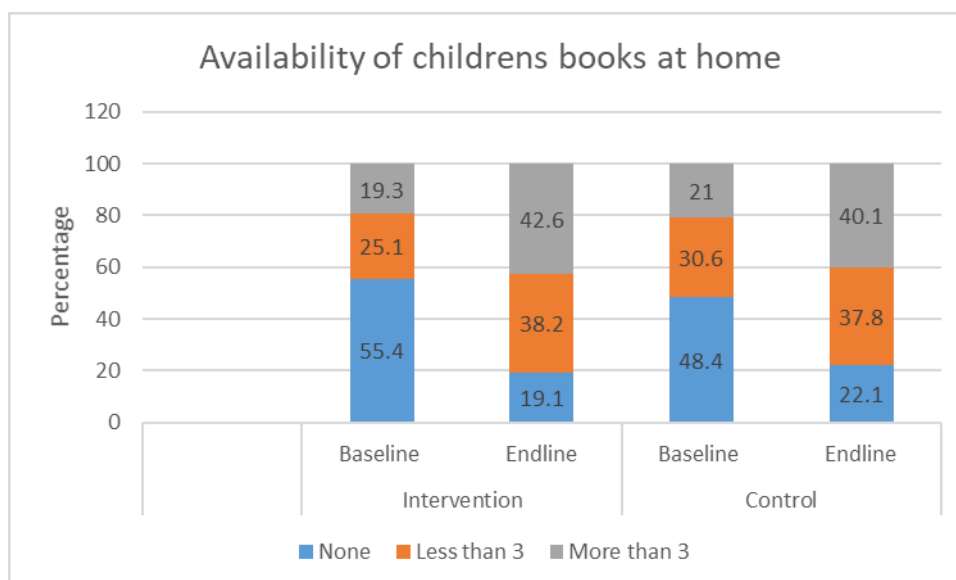


Figure 21: Availability of children's books at home

Table 26 includes information on total interaction and types of toys that children used. Types of toys a child has was assessed in three categories as home-made toys, toys bought from a shop, and household objects used as toys. At baseline, there was no significant association between the child owning home-made toys and the study group he/she was in ($\chi^2_1 = 3.698$; $p=0.054$). At endline, a significant higher proportion of children in the intervention group (59.6%) had home-made toys, compared to the control group (45%) ($\chi^2_1 = 11.091$; $p=0.001$). There was no difference between the proportion of children who had toys bought from a shop in two groups at baseline or endline. At baseline, a significantly higher proportion of children in the control group used household objects as toys compared to the intervention group. However, at endline there was no difference in the proportions of children using household objects as toys between the control and intervention groups. Even so, at endline a large proportion of children in the intervention group had been using household objects as toys. The number of children's books at home have increased from baseline to endline in both intervention and control arms. However, there was no significant difference in the number of children's books in homes in control and intervention groups (Table 27).

Table 26: Comparison of stimulation methods between the intervention and control groups

Number of interactions	Intervention		Control		Chi Square value (p value)	
	Baseline N (%)	Endline N (%)	Baseline N (%)	Endline N (%)	Baseline comparison between intervention and control	Endline comparison between intervention and control
No interactions	15 (4.2)	01 (0.3)	04 (1.4)	04 (1.8)	$\chi^2_3 = 7.421$ (0.06)	Fisher's Exact test=5.535 (0.121)
1-5 interactions	35 (9.5)	07 (2.2)	41 (14.2)	01 (0.4)		
6-10 interactions	147 (41.2)	187 (58.4)	114 (39.4)	135 (59.7)		

11-18 interactions	161 (45.1)	125 (39.1)	130 (45.0)	86 (38.1)		
Number of children's books						
None	212 (52.3)	61 (19.1)	150 (48.4)	49 (22.1)	$\chi^2_2 = 3.756$ (0.153)	$\chi^2_2 = 0.769$ (0.681)
Less than three	96 (25.1)	122 (38.2)	95 (30.6)	84 (37.8)		
Three or more	74 (19.4)	136 (41.6)	65 (21.0)	89 (44.1)		
Toys						
Home-made toys						
Yes	81 (21.1)	190 (59.6)	85 (27.4)	100 (45.0)	$\chi^2_1 = 3.698$ (0.054)	$\chi^2_1 = 11.091$ (0.001)
No	302 (78.9)	129 (40.4)	225 (72.6)	122 (55.0)		
Toys from a shop						
Yes	374 (97.7)	300 (94.0)	298 (96.1)	214 (96.4)	$\chi^2_1 = 1.349$ (0.245)	$\chi^2_1 = 1.528$ (0.216)
No	09 (2.3)	19 (6.0)	12 (3.9)	08 (3.6)		
Household objects						
Yes	191 (49.9)	306 (95.9)	173 (55.8)	167 (75.2)	$\chi^2_1 = 51.038$ (<0.001)	$\chi^2_1 = 2.422$ (0.120)
No	192 (50.1)	13 (4.1)	137 (44.2)	55 (24.8)		

A comparison of use of home-made toys between baseline and endline is included in Table 27. In both groups, out of children who did not have home-made toys at baseline, a significant proportion had home-made toys at endline (60.2% in the intervention group and 40.9% in the control group) (Figure 22).

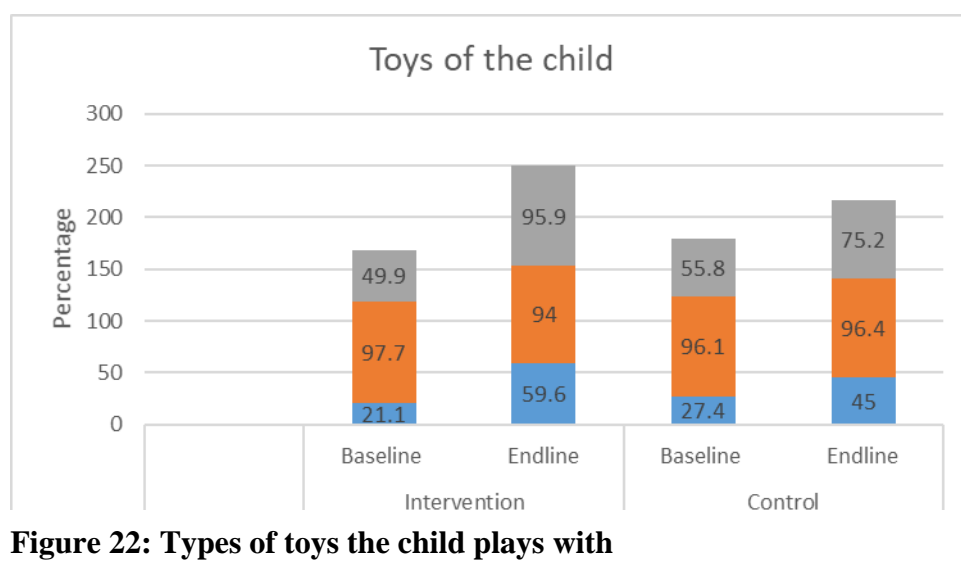


Figure 22: Types of toys the child plays with

Table 27: Comparison of use of home-made toys between baseline and endline

Home-made toys		Endline		p-value based on McNemar Test *
		Yes	No	
		N (%)	N (%)	
Intervention group				
Baseline	Yes	40 (57.1)	30 (42.9)	< 0.001
	No	150 (60.2)	99 (39.8)	
Control group				
Baseline	Yes	37 (54.4)	31 (45.6)	0.001
	No	63 (40.9)	91 (59.1)	

* Within baseline percentage

CAREGIVER AND CHILD INTERACTION

Caregiver-child interactions were assessed using Brigance parent-child interaction scale. There was no significant difference in the Brigance scale scores between the two study groups at baseline and at endline (Table 28).

The participants were also asked to report how much time he/she or any other member in the household usually spend with the child. At baseline, caregivers in the intervention group spent

more time with the child than caregivers of the control group (mean duration, 350.6 minutes vs 306.6 minutes) though the difference was not statistically significant (Table 28). At baseline, the time spent with the child had reduced in both intervention and control groups; however, caregivers of children in the intervention group spent significantly more time with children than caregivers of children in the control group (176.60 minutes vs 138.74 minutes) (Table 28).

At baseline, children in the intervention group spent more time in front of a screen on an average day as compared children in the control group (51.1 vs 35.3 minutes; $p=0.250$) (Table 25). At baseline, children in the intervention group had a significantly less screen time than children in the control group (28.2 vs 90.1 minutes; $p<0.001$) (Table 28).

Table 28: Comparison of caregiver-child interactions between control and intervention groups at baseline and endline

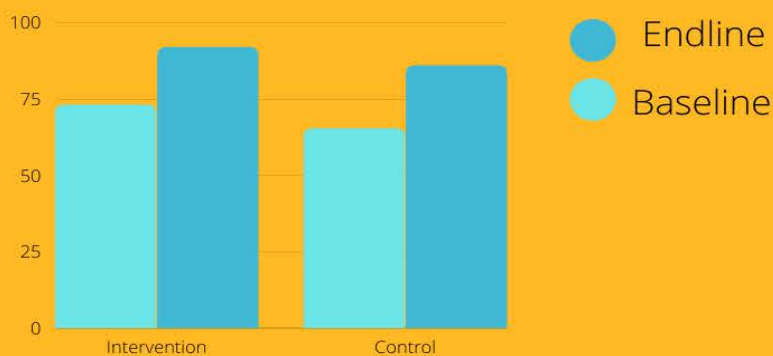
Caregiver-child interactions	Intervention		Control		t value (p value) *	
	Baseline (N=383)	Endline (N=318)	Baseline (N=308)	Endline (N=221)	Baseline comparison between intervention and control	Endline comparison between intervention and control
Brigance Score (mean \pm sd)	23.75 (± 2.36)	24.99 (± 2.19)	23.79 (± 2.38)	24.93 (± 2.22)	t=0.222 (0.825)	t=0.342 (0.732)
Time spent with the child (minutes) (mean \pm sd)	350.55 (± 346.37)	176.60 (± 109.42)	306.13 (± 239.80)	138.74 (± 124.96)	t=-1.916 (0.056)	t=-3.645 (<0.001)
Screen time (minutes) (mean \pm sd)	51.11 (± 221.53)	28.21 (± 48.90)	35.29 (± 106.00)	90.09 (± 335.36)	t=-1.151 (0.250)	t= 2.729 (<0.001)

*comparison between the intervention and the control group



Child Stimulation

Reading to the child

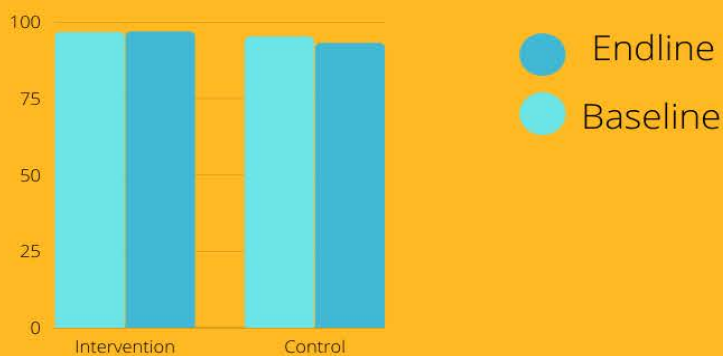


Caregivers who received GBG are 3.28 times more likely to read to the child*

* $p < 0.05$



Singing to the child

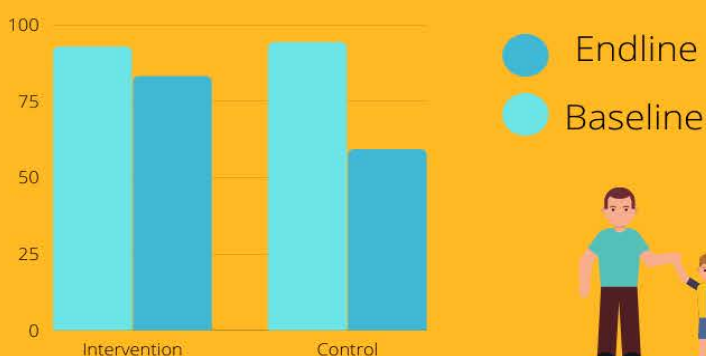


Caregivers who received GBG are 2.28 times more likely to sing to the child*

* $p < 0.05$



Taking the child out for a walk

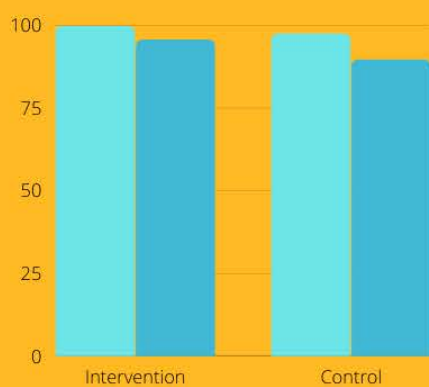


Caregivers who received GBG are 3.41 times more likely to take the child out for a walk***

*** $p < 0.001$



Playing with the child



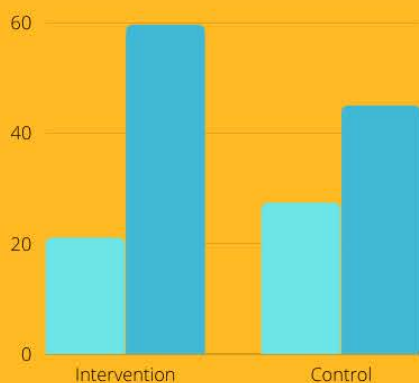
● Endline
● Baseline

Caregivers who received GBG are 2.28 times more likely to play with the child*

* $p < 0.05$



Home-made toys



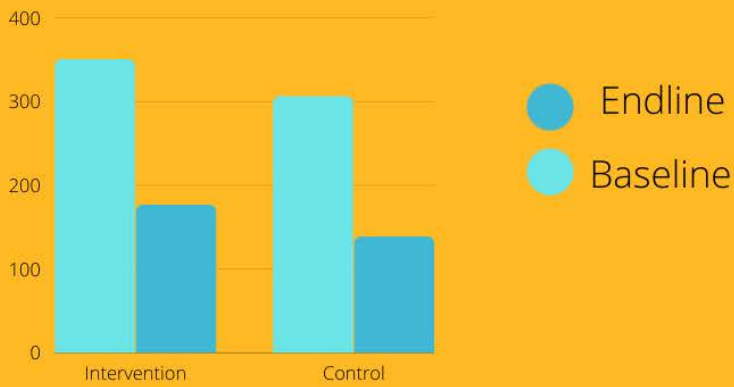
● Endline
● Baseline

Children in the intervention group have more home-made toys**

** $p < 0.01$



Time Spent with Child

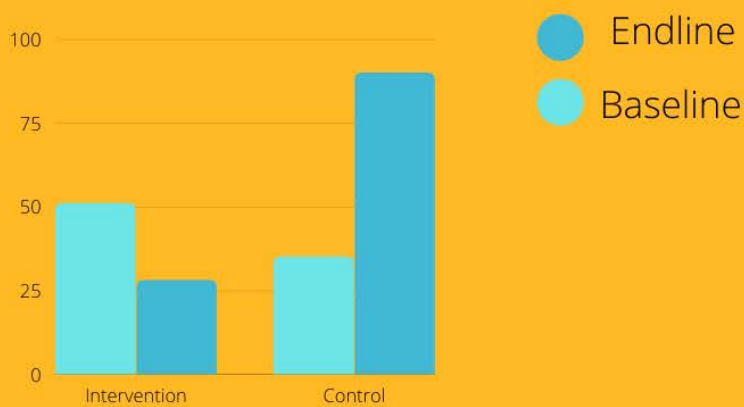


The caregivers in the intervention group spend more time with the children

**p<0.01



Screen time



Children in the intervention group spend less time in front of a screen

**p<0.01



CHILD PROTECTION

There were no differences in the percentages of caregivers employing different disciplining methods at endline between intervention and control groups except for slapping; slapping was less frequently used among caregivers in the intervention group as compared to caregivers in the control group (7.2% vs 16.7%; $p=0.001$) (Table 29).

Table 29: Disciplining methods used by caregivers on children in control and intervention groups at end line

Disciplining method	Intervention (%)	Control (%)	Chi square
Beating	40 (12.5)	35 (15.8)	$\chi^2_1 = 1.508$, $p = 0.219$
Explained	288 (90.6)	210 (94.6)	$\chi^2_1 = 2.198$, $p = 0.138$
name calling	1 (0.3)	2 (0.9)	$\chi^2_1 = 0.809$, $p = 0.369$
boundary setting	13 (4.1)	16 (7.2)	$\chi^2_1 = 2.526$, $p = 0.112$
slapped	23 (7.2)	37 (16.7)	$\chi^2_1 = 12.066$, $p = 0.001^{**}$
Shook	0 (0)	0 (0)	0
positive reinforcement	306 (95.9)	217 (97.7)	$\chi^2_1 = 1.352$, $p = 0.245$

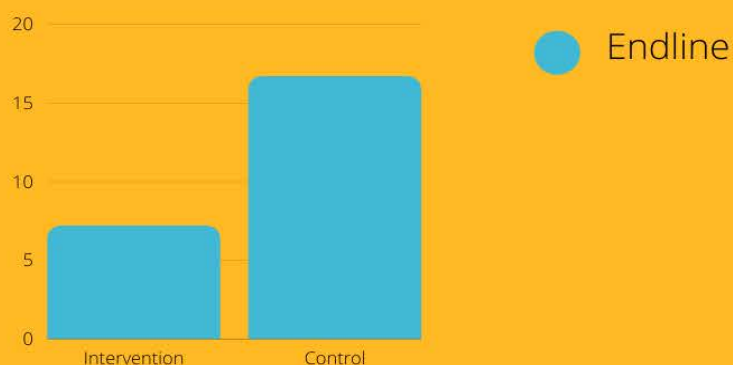
$** < 0.01$

Baseline and end line responses were not compared because as children grow, parents will use some kind of actions to discipline them.



Child Protection

Slapping as a disciplinary method



Caregivers in the intervention group used slapping significantly lesser than the control group **

**p<0.01



"... This child does not get hit like the first one... because now we know how to manage them"
(Ridigama- 30 year old mother with two children)



They taught us that we should not beat the child if the child breaks the toys... Earlier I used to hit my son because I didn't want to waste money...But now... I do not beat him...

(Chankanai - 39 year old mother with one son)



CHILD NEUROCOGNITIVE DEVELOPMENT

CREDI

CREDI long form was administered and data was analysed using R version 3.6.1 and CREDI package. The minimum child age for CREDI analysis is 18 months. Age values outside of 0-36 months (n=18 (3.3%)) were removed from the database during the analysis. Two (0.4%) participants had responses for less than five items.

At baseline the assessment was administered to 382 children; 307 children from intervention and control groups, respectively. Similarly, at endline, 309 children from the intervention group and 212 from the control group were included in the assessment.

At endline, there was no difference between the intervention and control group in terms of overall development or of any specific developmental domains (Table 30). There was no difference in the improvement of scores from baseline to endline between children of the intervention group and children of the control group in any of the domains or overall development (Table 30). CREDI is based on standard deviations from the population mean (Normal is considered ≥ -1 standard deviation).

Table 30: Comparison of raw CREDI scores between intervention and control

Domain	Intervention			Control			t-value ¹	p-value
	Baseline (N=382) Mean (\pm SD)	Endline (N=309) Mean (\pm SD)	Improvement Mean (\pm SD)	Baseline (N=307) Mean (\pm SD)	Endline N (212) Mean (\pm SD)	Improvement Mean (\pm SD)		
Motor	48.88 (\pm 2.20)	51.72 (\pm 1.14)	2.9590 (\pm 1.79)	49.06 (\pm 2.16)	51.89 (\pm 1.11)	2.7765 (\pm 1.65)	-1.173	0.241
Cognitive	49.06 (\pm 1.83)	51.22 (\pm 0.96)	2.2691 (\pm 1.65)	49.24 (\pm 1.77)	51.31 (\pm 0.93)	2.0870 (\pm 1.47)	-1.291	0.197
Language	49.31 (\pm 1.65)	51.69 (\pm 1.25)	2.4787 (\pm 1.45)	49.45 (\pm 1.57)	51.99 (\pm 1.29)	2.5402 (\pm 1.21)	0.523	0.601
Social emotional	49.11 (\pm 2.02)	51.80 (\pm 1.11)	2.8241 (\pm 1.63)	49.31 (\pm 2.02)	51.97 (\pm 0.95)	2.6587 (1.57)	-1.159	0.247
Overall development	49.09 (\pm 1.89)	51.61 (\pm 1.05)	2.6327 (\pm 1.54)	49.26 (\pm 1.85)	51.79 (\pm 1.01)	2.5156 (1.37)	-0.887	0.375

¹ based on 2-sample t-test

Similar results were obtained when prevalence data on developmental delays of children at endline were compared between intervention and control groups (Table 31).

Table 31: Development of children at endline by group

CREDI Scores at endline assessment					
Domain	Intervention children (N=308)		Control children (N=212)		Chi square statistic (p- value)
	n	%	n	%	
Motor (N=521)					
Normal	301	97.4	207	97.6	$\chi^2_1 = 0.027,$ (0.868)
Delayed	08	2.6	05	2.4	
Cognitive (N=693)					
Normal	293	94.8	205	96.7	$\chi^2_1 = 1.049,$ (0.306)
Delayed	16	5.2	07	3.3	
Language (N=693)					
Normal	301	97.4	205	96.7	$\chi^2_1 = 0.229,$ (0.633)
Delayed	08	2.6	7	3.3	
Social emotional (N=693)					
Normal	295	95.5	208	98.1	$\chi^2_1 = 2.635,$ (0.105)
Delayed	14	4.5	04	1.9	
Overall development					
Normal	301	97.1	210	99.1	$\chi^2_1 = 2.344,$ (0.126)
Delayed	09	2.9	02	0.9	

Comparison of development of children was done between intervention and control groups across three age categories (18-23 months, 24-29 months and 30-35 months); at endline, development of children was similar in both the intervention and control groups in all three age categories (Table 32).

Table 32: Comparison of development of children in control and intervention groups by age group

Age Category	N (%)	Control (mean raw score ± SD)	Intervention (mean raw score ± SD)	t value (p value)
18-23	164 (30.3)	N= 63	N= 99	
Motor		51.01 (±0.86)	51.07 (±1.05)	t=-0.409 (0.683)
Cognitive		50.77 (±0.71)	50.78 (±0.90)	t=-0.102 (0.919)
Language		51.15 (±0.74)	50.88(±1.00)	t=1.729 (0.086)
Socio-emotional		51.20 (±0.65)	51.05 (±0.95)	t=1.164 (0.246)
Overall		51.02 (±0.65)	50.95 (±0.90)	t=0.626 (0.532)
24- 29	150 (27.7)	N= 56	N= 93	
Motor		51.60 (±0.84)	51.57 (±1.03)	t=0.220 (0.826)
Cognitive		51.04 (±0.83)	51.09(±0.97)	t=-0.325 (0.746)
Language		51.50 (±1.02)	51.51 (±1.07)	t=-0.062 (0.950)
Socio-emotional		51.72 (±0.74)	51.65 (±1.04)	t=0.467 (0.641)
Overall		51.47 (±0.78)	51.46 9±0.96)	t=0.071 (0.944)
30-35	187 (34.5)	N= 78	N= 108	
Motor		52.64 (±0.88)	52.38 (±0.91)	t=1.899 (0.059)

Cognitive		51.81 (± 0.85)	51.69 (± 0.79)	$t=1.041(0.299)$
Language		52.83 (± 1.17)	52.52 (± 1.06)	$t=1.88 (0.061)$
Socio-emotional		52.60 (± 0.78)	52.55 9 ± 0.75)	$t=1.51 (0.131)$
Overall		52.47 (± 0.85)	52.29 (± 0.81)	$t=1.515(0.131)$

There is no difference between the intervention and control group with regards to CREDI analysis in all domains for all age groups.

MATERNAL MENTAL HEALTH

Maternal mental well-being

Table 33 includes information on maternal mental well-being that was assessed using WEMWBS. At baseline there was no difference between the well-being scores of the caregivers in the two study groups. At endline, (N=541), the mean maternal well-being score was significantly higher in the intervention group (51.61) than in the control group (49.21) ($p=0.001$). The overall well-being score ($\pm SD$) for the total sample had significantly decreased from 60.96 at baseline to 50.52 at endline ($p<0.001$).

In both control and intervention groups, there was a significant reduction in the mean mental well-being score from baseline to endline (-12.89 in control group and -9.29 in the intervention group); the difference in the mean reduction of maternal mental well-being scores between control and intervention groups was significant ($p=0.003$). This indicates that the caregivers in intervention group are more resilient to stressors as the reduction in well-being in the intervention group is lower than the control group.

Table 33: WEMWBS scores between the intervention and control groups

Maternal depression

	Intervention		Control		t test (p value)	
	Baseline Mean (\pm SD)	Endline Mean (\pm SD)	Baseline Mean (\pm SD)	Endline Mean (\pm SD)	Baseline comparison	Endline comparison
WEMWBS score	60.97 (\pm 11.50)	51.61 (9.288)	60.97 (\pm 11.79)	49.02 (9.050)	t=-0.009 (0.993)	t=-3.244 (0.001)

PHQ-9 was used to screen for depression. The cut-off score of PHQ-9 is 10 or above with a maximum score of 27. All the mothers included in the study had a score below 10 at baseline. The mean score for the total sample was 2.315; the mean scores of the control (2.180) and intervention (2.43) groups were similar ($p=0.166$) (Table 34).

Table 34: PHQ -9 questionnaire for screening depression between the intervention and control groups

	Intervention		Control		t test (p value)	
	Baseline Mean (\pm SD)	Endline Mean (\pm SD)	Baseline Mean (\pm SD)	Endline Mean (\pm SD)	Baseline comparison	Endline comparison
PHQ-9 Score	2.42 (\pm 2.36)	1.59 (\pm 2.28)	2.18 (\pm 2.22)	2.58 (\pm 3.87)	t=-1.344 (0.179)	t=3.478 (0.001)

The PHQ-9 scores in the intervention group significantly reduced from 2.42 at baseline to 1.59 at endline ($p<0.001$). The PHQ-9 scores in the control group at baseline (2.18) and at endline (2.58) were almost similar. At endline, the mean PHQ-9 score of the caregivers of the intervention group was significantly less than that of the caregivers of the control group ($p=0.001$).

The cut-off point 10 was used in this study to exclude moderate to severe depressive symptoms. At endline 15 caregivers had a PHQ-9 score >10 , comprising from 5 from the intervention group (1.5% out of 323) and 10 from the control group (4.4% out of 226). The proportion of caregivers with PHQ-9 scores above 10 was significantly higher in the control group as compared to the intervention group ($\chi^2_1=4.141$, $p=0.042$).



Caregiver Mental Health

Maternal Mental Well-being



The mental well-being of the mothers in the intervention group is significantly higher**

****p<0.01**



Maternal Depression



The mothers in the intervention group has significantly lower depressive thoughts**

****p<0.01**



CHANGES IN CAREGIVER PRACTICES DUE TO COVID19 RESTRICTIONS

Responses of the caregivers to the possible impact of the COVID-19 pandemic are given in Table 35. Children in the control group were reported to have missed meals sometimes ($n=14$; 6.3%) more than the children in the intervention group ($n=5$; 1.6%) ($\chi^2_1=9.36$, $p<0.003$). A significantly higher proportion of caregivers in the intervention group ($n=277$; 87.4%) stated that they cleaned their houses more than before the COVID-19 outbreak in comparison to the control group ($n=179$; 80.6%, ($\chi^2_1=6.382$, $p<0.025$). A significantly higher proportion of caregivers of the intervention group ($n=300$; 96.1%) reported that they washed the child's hands more than usual after the COVID-19 outbreak in comparison to the control group ($n=170$; 60.3%), ($\chi^2_1=53.821$, $p<0.001$). Furthermore, the percentage of caregivers in the control group who stated that they had difficulties in buying groceries was higher than in the intervention group ($p<0.01$).

Table 35: Impact of the COVID-19 pandemic

Changes due to COVID-19 restrictions	Intervention group N (%)	Control group N (%)	Chi square (p-value)
Changes in the quality of the diet of the child to COVID19 restrictions			
Yes	264 (84.6)	182 (82.0)	$\chi^2_1=0.654$ (0.419)
No	48 (15.4)	40 (18)	
Changes in the quality of the diet of the caregiver to COVID19 restrictions			
No change	90 (78.9)	27 (71.1)	Fishers exact 2.731
Sometimes	7 (6.9)	1 (2.6)	P <0.278
Don't know	17 (14.9)	10 (26.3)	
Changes in the quantity of the child's diet changed due to COVID19 restrictions			
Changed	31 (9.9)	30 (13.7)	$\chi^2_1=1.792$ (0.181)
No change	281 (90.1)	189 (86.3)	
Don't know	0 (0%)	0 (0%)	
Changes in the frequency of punishing the child due to the lockdown of curfew imposed for the COVID 19			
no change/less than usual	304 (97.7)	218 (98.2)	Fishers exact

all the time	2 (1.6)	0	3.109 (0.610)
most of the time	1 (0.3)	0	
sometimes	4 (1.3)	3 (1.4)	
don't know	0	1 (0.5)	
Changes in the number of meals taken due to COVID – 19 restrictions	312 (97.8)	208 (93.7)	Fishers exact
no change	5 (1.6)	14 (6.3)	9.361(0.003)
sometimes	2 (0.6)	0	
most of the time			
Changes in cleaning the due to COVID 19 outbreak			
no			
yes	38 (12.0)	43 (19.4)	$\chi^2_1=6.382 (0.025)$
don't know	277(87.4)	179 (80.6)	
	2 (0.6)	0	
Changes in handwashing practices after the COVID19 outbreak?			
sometimes	45 (14.4)	17 (7.8)	$\chi^2_1=53.821(<0.001)$
no change	12 (3.8)	49 (22.4)	
most of the time	200 (64.1)	100 (45.7)	
all the time	55 (17.6)	53 (24.2)	
Difficulties buying groceries due to the COVID 19 outbreak			
no			

sometimes	160 (51.3)	83 (37.9)	$\chi^2_2=9.304 (<0.01)$
most of time	136 (43.6)	121 (55.3)	
	16 (5.1)	15(6.8)	
Difficulties getting groceries delivered due to the COVID 19 outbreak			
no	166 (53.2)	113 (51.6)	$\chi^2_2=2.289(0.866)$
sometimes	133 (42.6)	95 (43.4)	
most of time	13 (4.2)	11 (5)	

USEFULNESS OF THE INTERVENTION

All participants mentioned that the programme was useful to them; of them, 50.3% (168 out of 309) mentioned that it was very useful, 46.7% (n=156) said it was useful and 3% (n=10) said to some extent (Table 36). These items were only asked from the intervention group of the study.

97.3% (N=328) of the caregivers mentioned that they shared the information they learned from GBG to other household members.

Table 36: Usefulness of the GBG intervention

	Not useful at all	To some extent	Useful	Very useful
	N (%)	N (%)	N (%)	N (%)
Usefulness	00 (00)	10 (03)	156 (46.7)	168 (50.3)

RESULTS OF THE QUALITATIVE ANALYSIS

Four prominent themes were derived from the transcribed data. A summary of themes and the sub themes are included in Table 37.

Table 37: Summary of themes and Subthemes

Theme	Subtheme
Theme 1: Knowledge gain and behavior change in participants	Optimizing brain development
	Child safety
	Nutrition
Theme 2: There were barriers to participation	Accessibility
	Caregiver support
	Motivation
Theme 3 : There were deviations from the protocol	GBG manual
	Home visits
	IYCF/WASH
	Monitoring
Theme 4 : The intervention sessions can improve	Selecting facilitators
	Organization
	Editing the manual to suit the local context

The results are presented in detail below.

THEME 1 : KNOWLEDGE GAIN AND BEHAVIOR CHANGE IN PARTICIPANTS

SUBTHEME 1: OPTIMIZING BRAIN DEVELOPMENT

Caregivers that received the GBG intervention program responded in a very uniform manner about the impact of stressors and brain development. The nine focus group discussions conducted in the three study areas revealed that the caregivers had understood the negative impact of stressors on the developing brain of their child. Given below are quotations of two mothers who described in detail on why they avoid physically or verbally punishing their child as a result of the knowledge they gained through the program.

I definitely shout at the child less. I have two other children so, its very chaotic at home. I used to scold or chase the younger one away when he interfered with the second ones studies (because he is doing the Grade 5 scholarship exam this year). But now when the little one comes to bother the sibling, I tell my second one to either share a pencil or pen with him. I keep him entertained and involved next to me.”

(Ridigama- 36 year old mother with three children)

They taught us that we should not beat the child if the child breaks the toys... Earlier I used to hit my son because I didn't want to waste money...But now... I do not beat him...

(Chankanai - 39 year old mother with one son)

The way we brought up the first child and second child is different. The first child is silent...Now because of this program... the second child is naughty... what is mean by naughty is active... This child does not get hit like the first one... because now we know how to manage them

(Ridigama- 30 year old mother with two children)

Many caregivers also added that they paid close attention to maintaining a peaceful home environment for the child after following the 2nd session of the intervention. They had learnt through the programs, that stressful home environments also have a negative impact on the development of the child. Therefore, some mothers also shared these concerns with their husbands.

As a result, parents attempted to resolve disagreements and arguments between them in a manner that did not affect the child.

Now my husband and I don't fight in a place the child could see... because we know it is stressful for the child

(Ridigama- 29 year old mother with one child)

The child learns from us. So we have to behave in a good manner. That means we should not fight in front of the child

(Chankanai – 23 year old mother with one child)

Many caregivers also spoke about the importance of play and exploration in regards to optimizing the development of a child's brain. Some mothers had become more lenient and understanding of the curious nature of their children mainly because they were aware of the neural brain connections that multiply during play and exploration. The focus group interviews revealed that most mothers in all study areas provided more learning opportunities to their children to facilitate development of their children. Many mothers recognized the importance of engaging with the child during play.

I learnt that 90% of brain development takes place from 0 - 3 years. When I speak to my child, I always use the word "no". Through the program I learnt that, it is not good .. I also learnt that the best toy is the mother Usually we give children toys and then we start doing our housework. But I learnt that a child's most valuable toy is the mother ...

(Ridigama- 28 year old mother with one child)

See usually we don't take much notice of them... she will say "amma come to play compittu ((a traditional game using a coconut shell and sand) with me".. then usually I would just tell her to call one of her other siblings. Now when the others go to school she is alone with me . But I spend a lot of time with her now... I do what she says. If its something dangerous I tell her and explain to her why she should not do that. Then she listens to me.

(Ridigama- 32 year old mother with three children)

We got to know about different types of games through this program... when they (children) play with sand it stimulates their fingers and gives them sensory stimulation... this increases brain connections

(Karachi- 25 year old mother with one child)

SUBTHEME 2: CHILD SAFETY

The caregivers said that they gained a lot of knowledge on child safety through the sessions. Many caregivers from all the three study areas had taken active steps to ensure the safety of their children. Some caregivers had taken action on eliminating or reducing hazards such as open wells, open tanks, plug points and gas cylinders. Many caregivers specifically emphasized that they are now very careful and mindful about who they leave their child with in the absence of a parent. Some had learnt the purpose of vaccination through these intervention sessions. Although, handwashing was carried out to model responsive caregiving practices, mothers had also learnt the correct method of washing their child's hands through the program, which was relevant during the COVID pandemic.

Earlier the gas cylinder was inside the house.. but last week we made it in a way where it is outside and the tube comes through the wall. In case there is an issue, the impact won't be so bad... we never thought of these hazards before these sessions

(Ridigama- 36 year old father with one child)

We learnt about vaccination. Actually I didn't know my child might get polio if I didn't give her the vaccination.

(Chankanai – 25 year old mother with one child)

I learnt that we should not keep the children everywhere with different caregivers without ensuring that they are safe...

(Ridigama- 25 year old mother with three children)

The hand washing technique they taught us was very useful during the corona situation

(Chankanai – 30 year old mother with one child)

SUBTHEME 3: NUTRITION

Although, nutrition was not a significant component of the GBG intervention, many facilitators have had discussions on the topic of nutrition during the intervention. This subtheme was also common to all three areas. The participants have gained knowledge regarding the types of food and quantity of food to give their children. The participants specifically mentioned that these were information they received from the GBG session conducted by the preschool teacher in the area.

We learnt so much about their nutrition and how to bring up children... the message from this program really registered in my mind... how and what to we give the child to eat ...

(Chankanai – 30 year old mother with one child)

Also I liked the section on child health and cleanliness ... also how to give meals.. how to prepare nutritious meals

(Ridigama- 25 year old mother with three children)

Miss told us that after 6 months completed, we can give the child all types of food. For a child of one year, we have to give everything in small amounts. Now we know that we have to give all food. I didn't know that before.

(Chankanai – 25 year old mother with one child)

In summary, the caregivers claimed to have received a lot of knowledge on brain development, child stimulation, safety and nutrition through the GBG sessions.

THEME 2: THERE WERE BARRIERS TO PARTICIPATION

Although many caregivers were interested in joining and actively participating in the sessions, the attendance of some caregivers were inconsistent. There are a number of factors that may have contributed to low or irregular participation of caregivers in certain study areas. These factors are presented under three subthemes.

SUBTHEME 1 – ACCESSIBILITY

As the study was conducted in vulnerable areas of Sri Lanka, some caregivers found transport an issue, as public transport in these areas were scarce. In some intervention areas, the distance from the venue of the intervention program and the home of the caregiver was large and some caregivers would have to walk approximately 5km to the venue. Ridigama is a hilly area and some mothers found it challenging to attend the sessions while carrying their children. It should be emphasized that not many caregivers experienced this issue. However, this is a theme that recurred in all focus group discussions.

It's very difficult for me to come... because I live on top of a hill ...I have to carry my child and come...

(Ridigama- 25 year old mother with three children)

I was in a rented house. After one year I went back to my mother's house. It is far away from here... so it is difficult to come

(Chankanai – 25 year old mother with one child)

I live on top of a hill around 5km away... I have to walk to the session carrying my child and that takes at least 45 minutes... All that for a 1.5 hour session and then I have to walk back.

(Ridigama- 26 year old mother with one child)

The facilitators or volunteers would call all participants prior to conducting a session to inform them on the date, time and venue of the intervention program in the event there was a change in the initial plan made at the previous session. However, communication was another barrier that impacted the attendance of the participants. Some caregivers did not own phones while some caregivers live in areas that do not have signal. There were other deeper societal issues within certain study areas on why participants avoided answering their phones. For instance, some caregivers from the northern region would avoid answering calls because they were afraid that they would have to speak to representatives of micro-financial institutions. This is a common problem in the area where people take loans from micro-financial institutions and are unable to pay back due to the high interest rates. Unfortunately, if the participants did not receive the message of the scheduled intervention, their attendance for the following sessions were also likely to be impacted.

I don't have a phone so they can't contact me... so I missed a few sessions

(Karachchi - 32 year old mother with two children)

Because I live on top of a hill ... I have to go to a specific place to get signal to my phone

(Ridigama- 26 year old mother with one child)

In Karachchi, the mothers don't use their mobiles very much. Even if you call them, they will not answer or not bother about the missed calls. ... this is happening because many of them get loans from various micro-financial institutions .. when they have not paid their due loans and institutions will call from time to time... so mothers stop answering their phones

(Chankanai- Stakeholder)

SUBTHEME 2- CAREGIVER SUPPORT

Some caregivers who were enrolled to the intervention were employed. They found it challenging to attend sessions as they also had to balance their responsibilities at home and at their work place.

Therefore, finding a time to attend the GBG sessions was extremely challenging for some working mothers. Furthermore, employed or not, mothers from these vulnerable areas are responsible for completing household chores such as cooking, cleaning, washing and child rearing. In some occasions, mothers were unable to attend the sessions as they could not finish their household chores prior to attending the session. On the other hand, there were some households that were overtly unsupportive of the intervention program and discouraged the mothers participation.

Some of the mothers did not come to the program they were some reasons behind that. They didn't have the support from the families and some of them, were doing jobs working in garment factories. Some people were working there so they had some difficulties participating the program because they will come late at night around 6 or 7pm. So that was really difficult. But we tried to get them on a Saturday or a Sunday but again you know they were working all week days and their free time or resting time is weekends... so that's the reasons they said. That time also if they were out of the house issues with husband and children because they have to do household things. So that is a really big challenge when we do this program especially when working with working mothers.

(Stakeholder)

My family doesn't have a very good impression of world vision... so they don't like me coming... my husband says that they take pictures of the children and edit the picture to make it look like the child has a disability and send it abroad and get money for the organization... they give a small amount to us... and keep the rest .. they took pictures of our kids some year ago... so I didn't come for many sessions

(Ridigama- 25 year old mother with one child)

SUBTHEME 3 – CAREGIVER MOTIVATION

Motivation plays a significant role in actively participating in a program. The motivation of caregivers was impacted negatively through a number of factors. Although they did not experience structural barriers or lack support, there were a few caregivers who were not motivated to

participate. Some caregivers did not participate in the program because of substance abuse and teledrama addictions.

When I go to field visit there were a number of mothers who were very reluctant to participate in this programme. Why? Because of the television... there is a huge addiction to teledramas among some caregivers. they don't care to feed their children because of the dramas. They don't even care for their children because of the teledramas

(Stakeholder)

A lot of parents you know...mothers and fathers are addicted to alcohol right? How we can do these caregiving awareness program to them? The issues are so much deeper*

**rhetorical question*

(Stakeholder)

Some did not participate because they felt that the program did not deliver as expected. Some caregivers were disappointed with the performance of the facilitators and some were disappointed that the program did not provide a reward to the participants.

It's montessori teacher who did this program... but I feel we need to get someone who is a bit more knowledgeable.. that's better .. like once we did a program with a lawyer on a management course... when he speaks we didn't even realize the time go... he had a skill...

(Ridigama - 35 year old mother with one child)

There are some problems with the facilitators...preschool teachers are not very effective and the parents have told me before... So the parents did not like to come for that particular facilitator's program... they avoid it

(Stakeholder)

WVL has been delivering such gift and subsidiaries to them in other programs.. So they are expecting something... and getting discouraged when they realize they are not getting anything

(stakeholder)

Many people in the village look at WV as an organization that gives donations... so they expect something to be given... so when more people get into program, there is some kind of tension amongst the people who are in it... because the more people that join, the less likely people are to receive a gift of some sort

(Ridigama - 30 year old mother with one child)

THEME 3: DEVIATIONS FROM THE PROTOCOL

The protocol developed for this research was specific and elaborate as the study was registered as a clinical trial. There were many conditions that had to be followed to ensure that the intervention group and control were receiving the same conditions apart from the GBG intervention. Through the focus group discussions, it was clear that there were deviations from the protocol specifically in reference to the GBG intervention, home visits, IYCF and WASH programs and monitoring.

SUBTHEME 1 - GBG SESSION

The GBG intervention sessions were not carried out in a similar manner in the various GN divisions of the study areas. For instance, some facilitators with the intention of improving caregiver motivation, conducted cooking demonstrations at the intervention sessions prior to covering the allocated session of the GBG program.

If some mothers are late we told the other mothers.. “come... let’s prepare a nutritious diet” and then we prepared diet... We managed to get them to come after that [after introducing the cookery demonstration program]. They are the ones who bring ingredients for that meal. They divide among themselves and they bring.

(Ridigama Co Facilitator)

Furthermore, although the protocol specifically mentions that tangible rewards will not be provided to participants, the facilitators promised the participants rewards for their attendance to coax the participants to attend the sessions.

I said “I will give something at the end of the training, so please come” because I want to get them to come.

(Chankanai Facilitator)

Most of the times we had to lie to get them to come... hoping that we can at least get them to the session

(Ridigama Facilitator)

Although the manual specifically mentions that the intervention session should include child care corners, there were no child care corners in some areas. This sometimes caused an inconvenience to both the caregiver and the facilitator of the program, as some children would become restless and require the caregiver’s full attention.

When we get mothers with children below 2 years they find it a bit difficult to leave the child at home. Then when they come with the child, it is a little inconvenient for them.. we couldn’t give a facility of a child corner.. there is no setting to do that in the field... so then mothers find it difficult.

(stakeholder)

SUBTHEME 2 - HOME VISITS

The home visits in Chankanai and Karachchi were conducted by the preschool teacher. Although it is unclear exactly what was carried out during these home visits, both the facilitators and caregiver focus group discussions revealed that home visits had taken place in Chankanai.

They came and checked things such as cleanliness of the house, child behaviour, food, hand washing and about husband.....whether he is beating or not. They asked a lot of things.

(Chankanai – 25 year old mother with one child)

Yes, they came and asked some questions from the child such as is your mother beating you? or scolding you? or is your mom angry with you? They don't believe us. If they directly asked from the child then it would be clearer to them.

(Kararchchi – 28 year old mother with two children)

As there were contrasting narratives from the facilitators and the caregivers with regards to home visits in Ridigama and Karachchi, it is unclear if the home visits were carried out according to the protocol. When the participants of the three focus groups in Ridigama were asked if they received home visits, **all** participants said they had not received home visits. However, in contrast the facilitators reported that they visited the homes of the participants sometimes with an appointment and sometimes without an appointment.

I went taking my baby with me the both times. In the morning, when the other two have gone to school, I take this one [her daughter] and walked there [house of the caregiver].

(Ridigama Co Facilitator)

We actually go unannounced to see whether they do things correctly

(Ridigama Facilitator)

In Karachchi, the focus group discussions with caregivers gave mixed views; some caregivers said that facilitators visited their homes and others reported that facilitators did not visit their homes. In some instances, they have visited homes however, the caregiver had not been present. However, it was clear that some facilitators risked their own safety during these home visits.

They [caregivers] are inside their houses. They don't come even come out when we call. The TV volume is high. They came out only after their dog had bitten us.

(Kilinochchi Facilitator)

When we went for the home visits, the mother was not there at home. She has gone to plant peanuts

(Kilinochchi Facilitator)

SUBTHEME 3- IYCF, WASH

According to the protocol, the intervention and control areas had to receive 2 sessions of IYCF and one session WASH. Although *some* participants in the North reported that they attended a IYCF session, many participants were unaware of these programs in all three areas. Participants from all three areas did not recall attending WASH sessions. Two of the stakeholders, discussed the challenges in carrying out the additional programs abiding by the protocol.

Actually we faced a lot of difficulties conducting the other programs. GBG session 100% was under our control. So we managed to do it. But when it comes to IYCF and WASH program we were depending on the MOH office staff so... one of the biggest challenge was adhering to the timeline. You know we had some timeline that said that each session should be within a certain period. But we couldn't achieve it because of the unavailability of the MOH staff. I think some of the IYCF and WASH programs we did not complete at all. Because later this COVID issue came and all other problems. Actually we couldn't achieve. That is one of the drawbacks. Because we had to depend on external people.

(Stakeholder)

The facilitators from Ridigama had carried out nutritional programs assuming that they were a part of the GBG sessions.

The nutritional program was part of Go Baby Go... so we did the program

(Ridigama Co Facilitators)

The interviews also revealed that other sessions such as PD Hearth and EVAC were carried out for the intervention group in some areas. However, it is not clear to what extent these programs were implemented.

SUBTHEME 4 – MONITORING

The mentors added that they found it extremely challenging to monitor the intervention accurately due to the lack of time and the lack of man power. As all three areas were geographically spread

out, monitoring multiple sessions in one day was not possible. Furthermore, the mentors also added that their other responsibilities within WVL were demanding and therefore, they could not meet the recommended monitoring standards put forward by the GBG program.

Monitoring all the sessions is not possible. Actually that drawback is there. We tried to rectify that as soon as possible. Another problem is because we did not involve program coordinators... they stepped aside saying they already have enough work load. So that's one of the big challenges. The research assistant and myself couldn't monitor and cover the large geographical areas.

(Stakeholder)

But with the work I had... with my busy schedule I felt that monitoring was not sufficient. I feel we need to have the facilitators in a continuous discussion, continuous monitoring and continuous support from us. I did as much as I could but this was a big challenge for me. Inside World Vision they will never give this as the only project, only GBG. So I saw that as a big challenge. From WVL side... it impacted the monitoring and follow ups.

(Stakeholder)

THEME 4: THE INTERVENTION SESSIONS CAN IMPROVE

The intervention were useful for many caregivers. Most caregivers had positive feedback regarding the GBG program and requested to rejoin the GBG program in the event it was being implemented once again. However, facilitators, caregivers and stakeholders provided constructive feedback on how the intervention can be streamlined to ensure smooth implementation in the future.

SUBTHEME 1 : SELECTING FACILITATORS

Although preschool teachers were selected as the most suitable facilitators for the program, through observations, the stakeholders in the North felt that the selection of preschool teachers as facilitators was not ideal. The main reason for this would be their varied education levels, their inability to grasp the concepts in the manual and their lack of skill in teaching adults effectively.

The stakeholder in Ridigama also mildly felt that the preschool teacher may not have been the most ideal candidate for facilitating these programs.

The really challenging part is training the facilitators. Any activity if you take... doing the activity is not what is important. You see? One activity if you can remember is throwing the ball... you keeping increasing the distance and throwing the ball. The activity is not what is important. What is important is what we are going to say after the activity. So there the facilitators part is very crucial. If the facilitator does not teach accurately, that will end like a game. We need to have good facilitators.

(North stakeholder)

At a time we felt that it is a good resource . but when we were having a discussion with them the skill is the problem. The preschool teachers doesn't have a much skill to facilitate this program .. teaching and facilitating are two different things

(North stakeholder)

The preschool teachers have a tendency to lecture parents.. but what they need to do is facilitate. So that was a small issue.. because I saw them trying to lecture a lot... when we talk about preschool teachers, they are people in the village but they like it when there is some level of respect given to them.. that want to be called teacher and treated that way... they are worried to lose that "place"... because when they do their tasks at the preschool, they might worry that people wont take them seriously. So they were hesitant to get close to the caregivers.

(Ridigama Stakeholder)

The stakeholders in the North also felt that the facilitators in Chankanai were more capable and efficient than the facilitators in Kilinochchi due to varied reasons. This also created a variation in the quality of intervention among the three study areas. Having facilitators at different skills levels in the study areas is a confounding factor.

There's a huge difference in the knowledge and quality of preschool teachers between Jaffna and Kilinochchi

(North Stakeholder)

Perhaps due to the facilitators lack of ability to grasp complex concepts, some topics related to brain development had been taught inaccurately by many caregivers and these misinterpretations had been accepted by the caregivers as facts.

There was an important session that spoke about brain development. Now we know that when we say no to the child the child's brain cells die. Usually is they take something like a scissor or knife to their hand, we are scared that they will cut themselves. But now when we stay by them and let them explore. Otherwise when we always say no always their brain cells die and this means the child's mental wellbeing drops.

(Ridigama- 28 year old mother of three children)

They also took a twine and taught us how a child's brain develops through our activities and how it breaks and gets destroyed when we hit them...

(Ridigama- 30 year old mother of two children)

SUBTHEME 2 : ORGANIZATION

Overall, organizing the intervention was challenging because the study was conducted in three vulnerable areas of the country. Stakeholders felt that the facilitators not performing as expected may have also been a result of their payments getting delayed. According to one of the stakeholders, the DS had the responsibility of completing this task in a timely manner. Furthermore, the facilitators had to conduct home visits and make phone calls related to the intervention. However, these expenses were not reimbursed according to facilitators and the stakeholders. If payment, transport and communication were carried out in an organized manner, some stakeholders felt that the intervention may have been more effective.

I would say it depends on the DS.. that means the staff of the WV. Chanakani payments was going timely they were doing really great... the involvement of volunteers and facilitators is also great. So maybe because of that, the mothers participation was better. In Kilinochchi we faced that problem because the DS are not really into this program. Actually from time to time, we had to remind the DS about the payments and everything. Volunteers of this DS had an attitude problems. May be this is one of the reasons.

(Stakeholder)

Actually one thing is the payment because no one will do it for free. They are spending their valuable time and they are preparing the things. Because this program needs a lot of preparation. So that really matters. So I would say if they could pay them a good payment then they will get motivated and we should give them some recognition actually... we didn't do that.

(Stakeholder)

All stakeholders added that involving government organizations in the implementation of the intervention would have a significant positive impact on the acceptability of the GBG program among potential participants.

If they [MOH] also supported through the program I feel the program will be endorsed better. Then ECCD officers, government duty bearers are there to monitor the quality of the program

(Stakeholder)

One thing we can do is collaborate with the civil society organizers. There are several community based organizations if every GN division. Actually we didn't do that for this project... but in other programs we do that. Because they are like community leaders. So when they are convinced, they will give a great support to us when implementing the project.

(Stakeholder)

SUBTHEME 3 : EDITING MANUAL TO SUIT LOCAL CONTEXT

Although the GBG manual has been developed and finalized, all the stakeholders felt that the manual needed to be culturally adapted to the Sri Lankan context. The stakeholders also felt that the content (especially in the first 4 chapters) needed to be simplified to ensure all participants of a program could grasp the content of each session accurately with no misinterpretations.

The first 4 sessions definitely need to be simplified... not only for the mothers.. but also for our facilitators.. even though we translated it, the manual needs to be simplified more... I think its hard to simplify it further from our level. For that, we will need a professional working in the field of ECCD...

(Stakeholder)

We have to make the program in a way that anyone can understand the content... this is how we can reach the vulnerable families (with low education) ... they are the ones who will benefit the most from such an intervention

(Stakeholder)

DISCUSSION

The GBG parenting intervention is an innovative and effective behaviour change communication model for improving development of children under three years. The GBG programme aims to

build caregivers' confidence and competence, with a view of maximizing their potential for their role as a caregiver during the first 1000+ days of a baby's life (*Go Baby Go | World Vision International*, n.d.).

The principle underlying any parenting programme is that a change in parent's behaviour will result in a change in the child's development and well-being. By promoting positive parenting behaviours and reducing negative behaviours, programmes promote positive child development. Promoting parent-child warmth, affection and attachment; the appropriate use of positive discipline, control and avoiding punishment; reducing the risk of maltreatment and stimulating children's cognitive and language and social emotional development are all potential goals of such programmes (Robertson et al., 2014). Home visits are an integral GBG intervention and this is likely to be an effective strategy to uplift the development of children from vulnerable areas in Sri Lanka.

Caregiving not only incorporates practical tasks, such as providing adequate nutrition and healthcare, but also providing early learning and stimulation, responsive caregiving, child safety and protection. Sound child behaviour management (including non-violent discipline), encouraging positive relationships within the family and beyond, and helping to build the child's sense of self-worth and competence are important. Good parenting is responsive. In order to respond appropriately, parents need to know what to do and what not to do and be able to do things consistently (Ward & Wessels, n.d.).

The Go Baby Go programme has been designed based on the above principles. It delivers a comprehensive package of parenting skills through 10 group sessions and a minimum of 4 home visits. Ideally, the intervention should be delivered through volunteers from the target community. Inclusion of home visits is a very important factor in delivering the intervention effectively. A South African programme has demonstrated that parenting and attachment can be improved through home visiting (Cooper et al., 2009). Similar to the GBG programme, the intervention was delivered by local lay women. There is also evidence from the United states that a home-visiting programme for at-risk mothers through the first two years of a child's life can reduce the risk for child maltreatment and child behaviour problems at age 15 (Olds et al., 1997).

According to Wessels, parenting programmes must strive to be effective and scalable. For that the programmes must meet the following criteria: 1. Have a clearly defined target population; 2. A programme design and delivery system that is tailored to the needs and cultural backgrounds of participating parents' 3. A programme theory that is plausible and based on evidence of what worked; 4. Realistic and measurable goals; 5. A sufficient amount of intervention; 6. Well-trained and well-supervised staff; and 7. Rigorous monitoring and evaluation processed to ensure that the programme is implemented as intended and that it is, in fact, effective (Wessels, 2012).

FACILITATORS

GBG is targeted to caregivers of vulnerable families. Hence, the sample used in this study was taken from three area programmes where the majority of households has been identified as vulnerable. The programme also has a sustainable delivery system which is delivering the intervention through trained volunteer facilitators from the same community. The biggest advantage in this method is that, since they are part of the community itself, they can better identify families who need interventions in caregiving and they can deliver the intervention in a sensitive and culturally appropriate manner. Also, when the facilitator is a person familiar to them, the participants may feel comfortable to approach the person and discuss their problems and ideas. In this study, pre-school teachers were chosen as facilitators which appears to be a reasonable approach because they are a group working closely with both children and caregivers and are generally well respected and accepted by the community. However, the results of the study show that having the preschool teacher as the facilitator may not be ideal because of lack of adequate education and facilitator skills. In addition, there was wide variability in skills among the facilitators. When recruiting facilitators from the community it is important to provide a thorough background knowledge on the theories and any additional information related to the concepts taught in the intervention. In this study, several components in the GBG curriculum required background knowledge in human biology to a certain extent (eg: Session 2- Formation of neural connection). When addressing such, it is recommended that the trainer devotes sufficient time to explain the biological concepts related to the activity so that the facilitators will be better prepared to facilitate the sessions as well as answer questions from the participants with confidence.

Apart from the theoretical knowledge, other soft skills such as effective communication and counselling skills have to be enhanced. In the facilitator-evaluation reports given by the mentors, certain aspects of communication skills were highlighted as areas for improvement. It was observed that some facilitators adopted an accusatory tone when addressing issues such as child malnutrition, lack of care and feeding problems. This may cause guilt and embarrassment in participants which may lead to stress in the caregiver and even dropping out of the programme. The aim of this programme was to correct unwholesome practices and to encourage healthy practices; the whole process was expected to take a positive approach and creating shame and guilt sharply contradicts this approach.

IMPLEMENTATION OF INTERVENTION

The GBG group sessions were planned to be delivered every other week with home visits at selected time points. However, we observed that implementation of the intervention was done without strictly adhering to this schedule. Sometimes, the gap was insufficient between sessions and sometimes there were gaps longer than a month. This raises the question whether the caregivers had adequate time to comprehend and practice what they learnt in the previous session before moving on to the next, and also whether the sessions were held at a frequency that enabled them to retain the information they learnt from previous sessions. This highlights the value of a proper monitoring system or a process evaluation to evaluate the extent to which the intervention was delivered the way it has been specified in the manual.

Through the qualitative analysis, it is evident that the mentors and facilitators have put in a lot of effort towards the implementation. Perhaps the implementation was impacted by the lack of manpower and organization. For instance, payments not being given on time can be discouraging for the facilitators as they themselves are people from these vulnerable areas. The discrepancies in narratives regarding home visits are of concern. Although facilitators say they conducted the visits, some caregivers stated that they never did. However, all caregivers emphasised that home visits would be extremely valuable.

ENDLINE EVALUATION

The endline assessment was carried out using telephone interviews to follow the health guidelines imposed by the government. A higher percentage of the caregivers in the intervention group responded to the survey and were cooperative. The caregiver survey was revised to accommodate the most important subscales only that enabled us to complete the interview within a minimum time duration to avoid survey fatigue (Sullivan & Artino, 2017). While it was a more feasible and doable method, adopting a different data collection method at endline poses the problem whether differences in the data collection methods at baseline and endline introduce bias. The CREDI was applied face-to-face to a sample of caregivers who were administered the telephone interview; the correlations between the CREDI raw scores obtained using telephone interview method and face-to-face method was satisfactory. Data collected by two different methods could be difficult to compare (Sullivan & Artino, 2017). CREDI is population level monitoring tool and is not extensive and therefore advisable for small scale research such as this study. As suggested by the research M&E bayley scales was supposed to be used. However, due to COVID-19 the CREDI scale was used.

RESULTS OF QUANTITATIVE STUDY

Data analysis was based on intention-to-treat where all participants who were randomized were included in the statistical analysis and analyzed according to the group they were originally assigned to, regardless of what intervention they received and to which extent they adhered to the protocol. This method allows to draw unbiased conclusions regarding the effectiveness of the intervention (McCoy, 2017).

- Nutrition

Exclusive breast feeding and complementary feeding are part of Infant and Young Child Feeding (IYCF) programme and these sections are included as an appendix in the GBG manual in order to give some basic information for the facilitators. It needs to be conducted when GBG is not integrated with existing health and nutrition programmes. In this study the GBG intervention was integrated with the CH&N (IYCF and WASH) programme of the Ministry of Health which focuses on child nutrition and sanitation; this programme was a common package activity for both intervention and control groups. Breast feeding practices of the 2 groups of children were similar at baseline. At endline, the percentage of caregivers in the intervention group breastfeeding children up to 24 months (continuation of breastfeeding) was significantly higher than that in the control group; hence this difference is likely to be due to an effect of the GBG programme. The responsive caregiving module of the GBG programme focusses on the importance of bonding and secure attachment through breastfeeding which may be the reason for the higher percentage of caregivers in the intervention group breastfeeding their children up to 2 years.

A significantly higher proportion of mothers in the intervention group continued to breastfeed the child after 24 months perhaps as an extension of the effect of the responsive caregiving module which is not a favorable practice because the national guideline is to breast feed the child for 2 years.

At baseline, fulfilment of the minimum dietary diversity of the children in the control group was better than that of the intervention group. Despite, a higher percentage of caregivers in the intervention group continuing to breastfeed beyond 24 months, at endline, a significantly higher proportion of the children in the intervention group had fulfilled minimum dietary diversity. To some extent, this is an indirect indicator of improved responsiveness and knowledge towards child nutrition. In this study we were unable to get anthropometric measurements at endline due to the social distancing restrictions imposed as a result of the COVID-19 situation. Correlating breastfeeding practices and minimum dietary diversity with anthropometric measurements would have provided a better understanding of the nutritional status of children. While promoting breastfeeding for mother-child bonding, it is also advisable to educate them on proper weaning and other nutritional aspects.

However, as there were varied nutritional sessions taking place in all three areas with no consistent program, it is difficult to attribute the intervention per se to the improved nutritional status of children in the intervention group.

- Responsive feeding

The questions used to assess responsive feeding was derived from 2 scales. A direct assessment of responsive caregiving and attitudes regarding feeding was made. A higher score reflects better responsive feeding. At baseline, responsive feeding patterns were similar in the two groups. At endline the control group had significantly higher scores than the intervention group suggestive of an improvement in the control group. The reason as to why the caregivers in the intervention group had a lower score at endline compared to the control group needs to be further investigated.

Some of the questions of the responsive feeding section included items such as practices related to feeding children.

- Child Stimulation

The importance of high level of stimulation during early childhood was a main focus of the GBG programme. Stimulation was assessed based on 6 activities; reading to the child, storytelling, singing to the child, taking the child out for a walk, playing with the child and naming objects with the child. When assessed based on whether or not any adult engaged with the child with these activities, reading, storytelling and playing were significantly higher in the intervention group at baseline. Compared with the baseline proportions, caregivers in both the intervention group and the control group have engaged in all 6 activities more at endline. This can be due to children growing up and becoming more interactive and parents being motivated to engage with the child through activities such as reading once they reach a certain age. For example, traditionally in Sri Lanka, children are not read to before the age of about 2.5 years. Therefore, they are not encouraged to use books until the traditional ceremony to introduce reading is performed.

It should also be noted that a higher proportion of caregivers in the intervention group has taken their children out for a walk compared to the control group at endline. Given the recent COVID-19 situation, whether this should be taken as a negative or positive trend is debatable. However, it

is important to note that the information received through the endline assessment does not reveal if the “walks” were within the home premises or outside.

In other activities, such as naming objects and playing, even though there was no significant difference in the engagement, the proportion of children who received these forms of stimulation was higher in the intervention group than the proportion in the control group, probably a direct effect of the GBG programme which emphasizes the importance of engaging the child in such activities to stimulate the development of the child.

At baseline, a larger proportion of children in the intervention group had more interactions compared to the control group. But at endline, there was no difference in the number of interactions a child received between the intervention and the control groups. At endline, there was no difference in the number of children’s books at home between control and intervention groups. Even though we expected the intervention group to have more books and more caregiver child interactions, we did not observe any significant difference between the intervention and control group. The possible reason for this could be lack of follow up through home visits to ensure that the mothers implement what they learnt at the group sessions.

The qualitative study shows that the caregivers play with their children more and engage with them even while conducting their daily chores. Perhaps, these changes in behaviors may not be well detected through the tool that was selected for the qualitative study.

A higher proportion of children in intervention group had home-made toys at endline compared to the control group. A high proportion of children in the intervention group used household objects as toys. This may be attributed to the knowledge given by the GBG programme on how to make toys for children using inexpensive items which can easily be found in a household environment. There was no significant difference between child-caregiver interaction scores between control and intervention groups at baseline or at endline. The time spent with the child decreased from baseline to endline in both groups, possibly due to the child growing up and attaining a certain level of independence such as playing alone etc. The additional responsibilities carried out by caregivers due to the changes in daily routine created by COVID 19 may have also impacted this.

- Disciplining

The quantitative analysis shows that the caregivers in the control group slapped their children significantly more as a method of disciplining. Findings of the qualitative study suggests that the intervention group had changed their disciplining strategies to ensure they were not hindering the development of their children. Most participants from the qualitative study said that they do not physically punish or shout at the same frequency they used to prior to the intervention. However, we do not know if the view points of the control group have also changed over time.

- Caregiver well-being and depression

At endline, caregivers in the intervention group had higher levels of mental well-being and lower depressive symptoms suggesting that they are better able to cope with daily stressors than the caregivers in the control group. However, the well-being scores of caregivers in both groups had declined from baseline levels. This may be due to the uncertainty caused by the prevailing health situation in the country and other difficulties arising due to that, the social desirability bias caused by house visits at baseline or use of a different method to collect data.

- CREDI

The CREDI raw scores, which is a caregiver reported development assessment instrument, were similar between the intervention and control groups for all developmental domains and age groups both at baseline and at endline.

The findings of the GBG parenting intervention in this study is consistent with the findings of other similar studies (Yousafzai, 2019). A report summarizing the findings of a systematic review conducted to identify the effects of responsive caregiving interventions on ECD in the first three years of life focusing on combined nutrition and caregiving interventions versus nutrition intervention, mentions that the impact on cognitive development and socio-emotional development assessed by BSID was low. The impact on behaviour problems and secure attachment was also low. The impact on language was moderate and the motor development was high. However, it reports that evidence from LMICs suggests that combined caregiving and nutrition interventions are significantly effective on a child's cognitive, language and motor development

compared to usual care. No benefits are observed on growth outcomes (Yousafzai, 2019). Another study done in rural Pakistan which assessed mother and child interaction by direct observation has concluded that responsive caregiving interventions are of particular importance to develop child socio-emotional abilities (Scherer et al., 2019). However, the findings of the present study did not reflect the same outcome.

Since the CREDI tool is a population growth assessment tool it may not be as sensitive as BSID and may not have captured subtle differences in development of the children of the two study arms (*Caregiver Reported Early Childhood Development Instruments (CREDI)*, n.d.).

HOME VISITS

There is a discrepancy between the number of home visits made according to the attendance sheets provided by the facilitators and the data gathered from the qualitative interviews. In some instances, caregivers had incorrectly assumed that the home visits done at baseline for data collection in the GBG programme were visits that were supposed to have been done during the implementation of the project. Although the manual specifies that facilitators conduct additional home visits for caregivers who are vulnerable, the data show that none of the caregivers received more than the 4 mandatory house visits. The University did not receive any completed home visit forms from all 3 study areas. Therefore, we are unaware of what was carried out during these home visits. While conducting the qualitative interviews, the interviewers found it very challenging to explain to the participants what home visits are. The caregivers often confused the baseline interviews (particularly BSID-III assessment) with the house visits and the intervention. Some caregivers from the intervention group were completely unaware about the home visits.

IYCF AND WASH

The qualitative interviews revealed that the CH&N programme had not been conducted in some areas. Overall, the interviews and the attendance sheets reveal that the WASH programme was not conducted in Chnakanai and Karachchi. Apart from the interventions (GBG, IYCF, WASH), some areas also received PDHearth and EVAC programmes of WVL. Attendance sheets of all CH & N

programmes have still not been provided. These discrepancies are a significant confounding factor towards the results of the study making it challenging to interpret the results.

FINDINGS FROM QUANTITATIVE AND QUALITATIVE RESULTS

The results of the quantitative analysis do not support the conclusion that caregivers who received GBG intervention have better responsive caregiving or children of the caregivers in the intervention group have better developmental outcomes. Perhaps, the knowledge that the participants gained from the GBG cannot be measured quantitatively especially behavioural change and attitudes. A more effective way to assess such aspects would be by using observational tools. The qualitative interviews indicated that there were noticeable behavioural changes that had taken place in the caregivers, however, these changes were not captured on the quantitative scales used in the study. When it comes to practices and attitudes, a qualitative analysis is more effective in understanding changes overtime. We see positive changes in early learning and stimulation practices which included components of responsive caregiving. Responsive caregiving is, across all nurturing care practices, related to health nutrition protection or early learning. Positive changes in early learning may indicate that caregivers become more sensitive child to child development and learning needs.

However, it is evident through the qualitative interviews that parents and children did benefit from this intervention as it provides knowledge and insight into the process of caregiving and child rearing. Also, the time frames used in the survey (eg. food intake during last 24 hours, interactions during last week) may not accurately capture everyday practices although these are the standard ways of measuring.

It was observed that GBG sessions in some GNs (Eg: Karachchi/ Akkarayan, Ridigama) were conducted in places where conditions were not optimal. Most of the time, there was no child care corner or volunteers to take care of young children while mothers participated in the sessions. Because of this, some mothers could not fully participate or focus on what was discussed in the sessions as they had to watch the children while in the sessions. This might have been a barrier for

the mothers to fully understand the concepts discussed in the GBG programme and also may have prevented them from participating in future sessions.

We also observed that a number of caregivers who were not in the study originally participating in the programme on their own accord. The participants have also given positive feedback on the programme at endline interviews. This suggest that caregivers did find the GBG programme useful and important.

LIMITATIONS

DEFICIENCIES IN PROTOCOL ADHERENCE DURING IMPLEMENTATION

It's important to consider that for a programme to be effective its implementation should be done with quality and fidelity – in GBG study in Sri Lanka, there were issues with dose (number of sessions planned vs. actual implementation), frequency (regularity either very frequent or with long delays) and information about implementation quality.

We noted that for some of the intervention GNs and control GNs in Chankanai, World Vison's EVAC programme (End Violence Against Children) had been conducted with IYCF. EVAC programme has content similar to some parts of the GBG programme, which poses a problem in analysing disciplining actions which fall under the child protection subscale.

DEFICIENCIES IN TRAINING AND SUPERVISION

While it is a practical approach to conduct training of facilitator sessions in a similar manner of an actual GBG session, more emphasis should be placed on describing technical details and background of certain physiological/pathological concepts. Such concepts are covered in training of trainer sessions but not in training of facilitators sessions in order to minimize the level of technical details the facilitators have to study and to maximize the focus only on effective delivery. However, we feel that being aware of such details enables the facilitator to transfer the knowledge to the participants more effectively and accurately because the facilitator understands the theory

behind the recommendations she is giving. This minimizes the room for messages being distorted and inaccurate assumptions.

We felt that when implementing the programme covering large geographical areas including a large number of people, more than one mentor is required to oversee the activity and monitor the progress of the facilitators. In this study, one mentor had to supervise all facilitators and co-facilitators in Rideegama and the other mentor had to supervise all facilitators and co-facilitators in Karachchi. Having too many facilitators to monitor is a big barrier for making individual observations and giving recommendations.

DATA QUALITY, CONSISTENCY AND AVAILABILITY

The endline assessment was originally planned to be carried out as a survey done via house visits which was the method employed at baseline. However, due to health guidelines in the country, the endline assessment was conducted via telephone interviews. This change in the method of interview may have had an impact on the responses.

The other major limitation is lack of data on implementation process. There is a severe lack of proper documentation and utilizing the documentation formats provided to track attendance which makes it difficult to assess how the program was implemented in each area.

INSTRUMENTS

The main outcome measurements of this study were anthropometric measurements of the child and BSID-III scores. However, due to the COVID-19 situation in the country and the social distancing rules, those assessments could not be performed and CREDI scores were used as the primary measure of child development. While CREDI is a validated tool used for assessing development at population level, it is based on the responses of caregivers which may not always reflect actual capabilities of the child.

Responsive feeding and Brigance child interaction scales assess the attitudes of the caregiver which may be subjected to social desirability bias. Since this study did not make use of a tool to assess social desirability bias, it is difficult to determine whether the scores are influenced by social

desirability and to which extent it has affected the scores. These scales have not been validated for a Sri Lankan setting which makes it challenging to interpret the results.

Attendance details for IYCF was only available for a few GNs. No information was available regarding WASH sessions in any of the three areas. Therefore, it is difficult to predict whether the participants received the intervention as planned.

RECOMMENDATIONS

PROVIDING AWARENESS OF THE PROGRAM

It is recommended that before commencing the programme, the caregivers who wish to participate in the program are made aware of the scope and objectives of the programme so that they participate with understanding. Also, prior to the commencement participants have to be made aware what the programme entails (number of sessions, duration and house visits) so that they have a better overall understanding and preparedness.

RECRUITMENT AND TRAINING OF FACILITATORS

While it is important to recruit facilitators from the community itself to ensure sustainability of the programme, it is also important to make sure that the best possible people are recruited as facilitators which will ensure that the key messages are delivered accurately and effectively. We recommend to provide a more stringent and comprehensive training to the pre-school teachers should they continue to act as facilitators of the programme to make sure they understand the rationale behind the message they are delivering. However, providing such trainings may take time and be costly. Therefore, as an alternative approach it is recommended to recruit persons who have a background related to early childhood development practices. Also, providing a training on effective communication and facilitation would be useful for the facilitators to conduct sessions more effectively.

DOCUMENTATION

Proper documentation is of utmost importance in evaluating a programme. It is important to emphasize this and train facilitators and mentors to maintain records related to the program (dates of the sessions, caregiver attendance, payment details etc) so that it is easy to assess the programme in the long term. Routine documentation may improve the acceptance and credibility of the programme.

MONITORING

We recommend to adhere to the one-mentor for- every-five-facilitators criteria. This will reduce the burden on the mentor and will enable him/her to pay close attention to individual facilitators and provide guidance. In the long run, this will be a positive impact on the sustainability of the programme and will lead to facilitators striving to be more effective because they will feel that they are also being improved as persons. Since the facilitators are contributing to this programme voluntarily, it is important that they be rewarded in some way for them to continue to be in the programme.

BETTER ORGANIZING

Better organization of sessions and proper scheduling improves the credibility and acceptance of the programme. It is recommended that sessions are prescheduled and the dates are properly communicated to the participants well in advance, rather than having ad hoc schedules.

CONCLUSION

There was no difference in the age-appropriate child developmental outcomes between the intervention (GBG integrated intervention and CH&N programme) and the control group (CH&N programme only).

Caregivers in the intervention group demonstrated better responsive parenting practices in child stimulation (reading, singing, taking out for a walk and playing with the child) and breastfeeding practices. There was no difference in caregiver-child interactions (Brigance) and other child

stimulation activities (storytelling and naming) between the intervention and control groups. However, certain behavioural changes have taken place in some of the participants of the GBG sessions.

Children of mothers/primary caregivers provided with the CH&N programme and GBG programme (intervention group) had a significantly better nutritional status following the intervention than those who received CH&N programme only.

Caregivers in the intervention group had better levels of mental well-being compared to the caregivers in the control group and also demonstrated significantly better resilience during stressful times.

REFERENCES

- Caregiver Reported Early Childhood Development Instruments (CREDI)*. (n.d.). Retrieved December 3, 2020, from <https://sites.sph.harvard.edu/credi/>
- Cooper, P. J., Tomlinson, M., Swartz, L., Landman, M., Molteno, C., Stein, A., McPherson, K., & Murray, L. (2009). Improving quality of mother-infant relationship and infant attachment in socioeconomically deprived community in South Africa: Randomised controlled trial. *BMJ*, 338(apr14 2), b974–b974. <https://doi.org/10.1136/bmj.b974>
- Go Baby Go | World Vision International*. (n.d.). Retrieved December 10, 2019, from <https://www.wvi.org/maternal-newborn-and-child-health/go-baby-go>
- McCoy, E. (2017). Understanding the Intention-to-treat Principle in Randomized Controlled Trials. *Western Journal of Emergency Medicine*, 18(6), 1075–1078. <https://doi.org/10.5811/westjem.2017.8.35985>
- Olds, D. L., Eckenrode, J., Henderson, C. R., Kitzman, H., Powers, J., Cole, R., Sidora, K., Morris, P., Pettitt, L. M., & Luckey, D. (1997). Long-term effects of home visitation on maternal life course and child abuse and neglect. Fifteen-year follow-up of a randomized trial. *JAMA*, 278(8), 637–643.
- Robertson, J. P., New Zealand, Families Commission, New Zealand, & SuPERU. (2014). *Effective parenting programmes: A review of the effectiveness of parenting programmes for parents of vulnerable children*.
- Scherer, E., Hagaman, A., Chung, E., Rahman, A., O'Donnell, K., & Maselko, J. (2019). The relationship between responsive caregiving and child outcomes: Evidence from direct

observations of mother-child dyads in Pakistan. *BMC Public Health*, 19(1), 252.
<https://doi.org/10.1186/s12889-019-6571-1>

Sullivan, G. M., & Artino, A. R. (2017). How to Create a Bad Survey Instrument. *Journal of Graduate Medical Education*, 9(4), 411–415. <https://doi.org/10.4300/JGME-D-17-00375.1>

Ward, C., & Wessels, I. (n.d.). *Rising to the challenge: Towards effective parenting programmes*. 4.


Wessels, I. (2012). *Parenting Programmes in South Africa: Investigating Design and Evaluation Practices* [UCT]. <http://hdl.handle.net/11427/11562>

Yousafzai, A. K. (2019). *World Health Organization Recommendations on Caregiving Interventions to Support Early Child Development in the First Three Years of Life: Report of the Systematic Review of Evidence* [Report of the Systematic Review of Evidence]. Harvard T.H. Chan School of Public Health.

ANNEXURES


ANNEXURE A - ERC APPROVAL FOR THE PROJECT AMENDMENT

Approval by the Ethics Review Committee, Faculty of medicine, University of Kelaniya



Ethics Review Committee

SIDCER(Strategic Initiative for Developing Capacity in Ethical Review) recognized ERC
Faculty of Medicine, University of Kelaniya, Ragama, Sri Lanka
FWA00013225



Chairperson
Prof. A.R. Wickremasinghe

Vice Chairperson
Dr. S.T. De Silva

Secretary
Dr. K.M.N. Perera

Assistant Secretary
Dr. P.A.D.H.N. Gunathilaka

Committee members
Prof. A. Pathmeswaran
Dr. W.N.S. Perera
Prof. C. Ranasingha
Prof. I.D.G. Kithuluwaththa
Dr. C.W. Subasinghe
Dr. T. Palihawadana
Prof. A.S. Dassanayake
Prof. K.P.J. Perera
Dr. C. Mettananda
Prof. H.S.A. Williams
Dr. Pavithra Godamunne
Dr. Aruni Hapangama
Dr. Sachith Mettananda
Prof. Kumara Mendis
Dr. P.C. Chandrasinghe
Dr. S. Hettiarachchi
Dr. Deepani Siriwardhana
Dr. J. H. ...

26.06.2020

Our Ref. No: P/07/01/2019

Prof. A.R. Wickremasinghe
Senior Professor and Head of the Department
Department of Public Health,
Faculty of Medicine,
University of Kelaniya.

Dear Prof. Wickremasinghe,

Title: Evaluation of "Go Baby Go" child development programme among vulnerable groups in Sri Lanka – A pragmatic cluster randomized trial.

Investigators: Prof. A.R. Wickremasinghe, Ms. D.R. Peiris, Prof. R. Jayasuriya, Dr. P. Godamunne, Dr. A. Munene, Mr. P. Mayuran, Dr. V. Sargsyan, Mr. A. Clucas, Ms. E. Indriani, Dr. R. Perera, Ms. J. Francis, Ms. Shyama Silva

I am pleased to inform you that Ethics Review Committee which met on 09th June 2020 has approved amendments to the following documents.

	English		Sinhala		Tamil	
	Version	Date	Version	Date	Version	Date
Protocol	03	05/05/2020				
Instruments	03	05/05/2020	03	05/05/2020	03	05/05/2020
Participant Information Sheet	03	05/05/2020	03	05/05/2020	03	05/05/2020
Consent Form	03	05/05/2020	03	05/05/2020	03	05/05/2020

Please note that the ERC approval period and condition of approval remains as stated in the previous approval letter.

Thank you.
Yours sincerely,

SLCTR approval



**Sri Lanka
Clinical Trials Registry**

Managed by the Sri Lanka Medical Association

[LOGIN](#)
[CREATE ACCOUNT](#)
[Home](#)
[About](#)
[Trials](#)
[FAQs](#)

[Home](#) » [Trials](#) » SLCTR/2019/014

Evaluation of "GO BABY GO" child development programme among vulnerable groups in Sri Lanka - A pragmatic cluster randomised trial

SLCTR Registration Number: SLCTR/2019/014

Date of Registration: 01 Apr 2019

The date of last modification: Aug 11, 2020

Trial Status




TRIAL OPTIONS

[View](#)

[Publications](#)

[Progress Reports](#)

[Protocol Change](#)

 Protocol changed

ANNEXTURE B - PLAN ACCORDING TO THE PROTOCOL

GBG Intervention Implementation Plan

Month →	Jul 19	Aug 2019				Sep 2019				Oct 2019				Nov 2019				Dec 2019				Jan 2020				Feb 2020				March 2020				April 2020			
Week →	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
Intervention Group																																					
GBG Trainings																																					
Phase 1																																					
Phase 2																																					
Phase 3																																					
GBG Invitation																																					
2 nd Stage Adjusted ¹																																					

Month →	Jul 19	Aug 2019				Sep 2019				Oct 2019				Nov 2019				Dec 2019				Jan 2020				Feb 2020				March 2020				April 2020			
Week →	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
GBG Sessions																																					
2 nd Stage Adjusted																																					
GBG Home Visits																																					
2 nd Stage Adjusted																																					
CH&N																																					
IYCF S1																																					
2 nd Stage Adjusted																																					
IYCF S2																																					

Month →	Jul 19	Aug 2019				Sep 2019				Oct 2019				Nov 2019				Dec 2019				Jan 2020				Feb 2020				March 2020				April 2020			
Week →	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
2 nd Stage Adjusted																																					
IYCF S3																																					
2 nd Stage Adjusted																																					
WASH																																					
2 nd Stage Adjusted																																					
Control Group																																					
IYCF S1																																					

Month →	Jul 19	Aug 2019				Sep 2019				Oct 2019				Nov 2019				Dec 2019				Jan 2020				Feb 2020				March 2020				April 2020			
Week →	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4
2 nd Stage Adjusted																																					
IYCF S2																																					
2 nd Stage Adjusted																																					
IYCF S3																																					
2 nd Stage Adjusted																																					
WASH																																					
2 nd Stage Adjusted																																					

¹Second stage adjusted time refers to the revised schedule after April.

ANNEXTURE C - ACTUAL IMPLEMENTATION

GBG Group Sessions

	Aug				Sep				Oct					Nov				Dec				Jan					Feb				March		
	1	2	3	4	1	2	3	4	1	2	3	4	5	1	2	3	4	1	2	3	4	1	2	3	4	5	1	2	3	4	1	2	3
Rideegama																																	
Wanduressa											S1/S 2	S 3	S 4	S 5		S 6			S 7			S 8							S9	S10			
Waliminikanda									S 1	S2	S 3	S 4	S 5		S 6			S 7			S 8												
Diniminyateena				S 1	S 2	S 3			S 4		S 5					S 6	S 7										S9		S10				
Nethulpitiya				S 1	S 2	S 3								S 4	S 5											S 9							
Kadupalatha							S 1	S 2		S3				S 4	S 5	S 6		S 7			S 8					S 9			S10				

Skanthapuram						S 1					S2/S 3				S 4					S 5	S 5			S 6					S7		S8	S8		
Ambalkulam								S 1	S 2	S 2	S3						S 4	S 4	S 5	S 5	S 6	S 6						S7	S7	S7	S8	S8		
Krishnapuram						S 1	S 1	S 2	S 2	S3	S 3					S 4		S 5	S 5	S 6	S 6						S7					S8		

ASH and IYCF sessions for the intervention group

	Aug				Sep				Oct					Nov				Dec				Jan					Feb				March				
	1	2	3	4	1	2	3	4	1	2	3	4	5	1	2	3	4	1	2	3	4	1	2	3	4	5	1	2	3	4	1	2	3	4	5
Rideegama																																			
Wanduressa																																			
Waliminikanda																																			
Diniminyateena																																			
Nethulpitiya																																			

[illegible]

**The attendance sheet mentions IYCF and End Violence Against Children (EVAC) sessions (No indication if WASH was conducted)

WASH and IYCF sessions for the control group

	Aug				Sep				Oct					Nov				Dec				Jan					Feb				March				
	1	2	3	4	1	2	3	4	1	2	3	4	5	1	2	3	4	1	2	3	4	1	2	3	4	5	1	2	3	4	1	2	3	4	5
Rideegama																																			
Jankure																																			
Kithulgolla																																			
Paragoda																																			
Niyangama																																			
Pallehorombuwa																																			

GBG Training of facilitators sessions - Training Dates

Area	Session 1	Session 2	Session 3	Session 4	Session 5	Session 6	Session 7	Session 8	Sessions 9 and 10
Ridigama*									
Chankana	20/08/2019	20/08/2019	30/08/2019	21/09/2019	20/11/2020	05/12/2019	06/01/2020	31/01/2020	03/03/2020
Karachahi	31/08/2019	31/08/2019	17/09/2019	17/09/2019	03/12/2019	10/02/2020	10/02/2020	24/02/2020	

*Dates not received

Participant attendance for GBG, WASH and IYCF sessions in intervention group

Area	GN	Number of GBG sessions	Number of registered participants	GBG sessions			
				Never attended a session	Less than 50%	50% - 80%	≥80%
Ridigama			53	12 (22.6)	14 (26.4)	16 (30.2)	11 (20.8)
	Wanduressa	10	21	10 (47.6)	03 (14.3)	03 (14.3)	05 (23.8)
	Diniminyathenna	10	16	00 (0.0)	08 (50.0)	06 (37.5)	02 (12.5)
	Nethulpitiya	09	09	02 (22.2)	02 (22.2)	04 (44.4)	01 (11.1)
	Kandupalatha	10	07	00 (0.0)	01 (14.3)	03 (42.9)	03 (42.9)
Chankanai			177	28 (15.8)	11 (6.2)	30 (16.9)	108 (61.0)
	Tholpuram west	09	33	06 (18.2)	00 (0.0)	04 (12.1)	23 (69.7)
	Moolai	08	34	11 (32.4)	02 (5.9)	09 (26.5)	12 (35.3)
	Chullipuram east	10	37	04 (40.8)	08 (21.6)	11 (29.7)	14 (37.8)
	Chulipuram west	08	23	05 (21.7)	00 (0.0)	03 (13.0)	15 (65.2)
	Araly North	10	29	01 (3.4)	00 (0.0)	00 (0.0)	28 (96.6)
	Vaddu south	09	21	01 (4.8)	01 (4.8)	03 (14.3)	16 (76.2)

Karachchi			153	06 (3.9)	14 (9.2)	67 (43.8)	66 (43.1)
	Akkarayan	06	51	00 (0.0)	05 (9.8)	36 (70.6)	10 (19.6)
	Skanthapuram	06	38	00 (0.0)	03 (7.9)	21 (55.3)	14 (36.8)
	Ambalkulam	06	51	00 (0.0)	05 (9.8)	36 (70.6)	10 (19.6)
	Krishnapuram	08	35	04 (11.4)	05 (14.3)	08 (22.9)	18 (51.4)
Total			383	46 (12.0)	39 (10.2)	113 (29.5)	185 (48.3)

Percentage of GBG Home visits

	No house visits conducted (%)	3 or less house visits have been conducted (%)	All 4 house visits have been conducted (%)
Rideegama	24.5	7.5	67.9
Chanakanai*	34	37.5	28.5
Karachchi	2.8	97.2	0

*Moolai is not included in the calculation since no data has been received from the GN

 ANNEXTURE D-OBSERVATIONS

ToT observations from Chankanai

Site	Chankanai/Vaddukoddai South	Date:	08th September 2019	Time:	4pm-5.30pm
Segment/Activity		Observations		Comments	
Starting and ending time		Session started on time and ended on time			
Resource Persons		Both Facilitator and Co-facilitator participated			
Participants		11 (out of 21)			
Preparation of facilitators		<p>Satisfactory</p> <p>Facilitators only have the abridged version of the manual which is only suitable for a trainer who is very much familiar with the complete manual.</p> <p>The facilitators were friendly and helpful</p>		The complete manual should be given to the facilitators	
Introduction		Introduction to the programme was given. Whether the ground rules were established is unclear.		Establish clear ground rules and have them displayed during the session.	

Activity 1A - Caregiver Attitudes and Practice Self-Assessment (+ 15 Minutes)	Not done	The coordinator mentioned that Brigance questionnaire which should be completed under 1A was done during the initial house visit which had been done prior to Group session1.
Activity 1B- Hopes and Dreams for My Child4 (+ 15 Minutes)	Completed successfully. The parents completed the drawing activity and a discussion was held.	
Activity 1C - Model Baby - Building Resiliency vs. Risk (+ 15 Minutes)	Completed successfully. A copy of the pictures given in the manual was given to each person along with the translated version of the story. A discussion took place.	The story was translated and the names were changed into common Tamil names. The pace was a little too fast. Could have spent sometime in explaining the facts.
Activity 1D- Health & Growth, Learning and Protection (+ 40 Minutes)	Completed the group activity.	
Activity 1E - : GBG Learning Tree (+ 15 Minutes)	Learning tree activity was completed. Key messages were discussed at the end.	Doubtful whether they understood the idea behind the learning tree activity.

Other observations	No childcare corner	This caused much disturbances to the sessions and distracting mothers. However, children in this area are unlikely to be with someone who is not familiar to them and therefore, child care corner would not be a solution to this problem. We recommend that to ask parents to keep children at home and only to bring when absolutely necessary.
--------------------	---------------------	--

ToT observations from Karachi

Site	Karachi/ Akkarayan	Date:	09th September 2019	Time:	4pm-6pm
Segment/Activity		Observations		Comments	
Starting and ending time		Session started on time.			
Resource Persons		Both facilitator and co-facilitator participated. The mentor was also present and participated in the discussions.			
Participants					

Preparation of facilitators	Satisfactory	
Introduction	-Could not observe- Ground rules were not discussed explicitly	We recommend to establish ground rules and having them displayed throughout the meeting.
Activity 1A-- Caregiver Attitudes and Practice Self-Assessment (+ 15 Minutes)	Not done	The coordinator and mentor mentioned that this activity was done during the first house visit.
Activity 1B- Hopes and Dreams for My Child4 (+ 15 Minutes)	Facilitators explained the activity effectively. Mothers completed the activity with interest.	
Activity 1C - Model Baby - Building Resiliency vs. Risk (+ 15 Minutes)	Printed copies of the story from the translated manual were given to each participant. Facilitator got one person to read out the story. Resilient and At-risk pictures were explained.	
Activity 1D- - Health & Growth, Learning and Protection (+ 40 Minutes)	Group activity completed.	

Activity 1E- GBG Learning Tree (+ 15 Minutes)	Learning tree completed by a few.	
Other observations	<p>Session conducted in an outdoor environment.</p> <p>No separate child care corner.</p>	<p>There were lots of animals (chickens, dogs, etc) in the environment so was not the best place to conduct the programme. The coordinators mentioned that they would be doing the next sessions at a different place.</p> <p>Children were running about and a young girl fell on the floor and hit her head on the floor due to lack of supervision. The mother was very worried and immediately went home. The session ended without proper wrapping up of the discussion afterwards. Having arrangements to care for children during sessions will improve the quality of the sessions and will prevent such accidents.</p>

ANNEXTURE E- MENTOR REPORTS

GBG Mentor reports on the performance of facilitators

Area	Name of the facilitator	Session and Date	Score			Comments
			Content (5)	Dialogue counselling process (15)	Communication skills (20)	
Rideegama						
Diniminyathenna	Mangalika Piyaseeli Nimali Wijekoon	Session 02 (07.09.2019)	03	09	16	Strengths: Able to get the attention of everyone and engages with participants Improvement points: Suggest to use simple language when explaining new concepts
		Session 06	04	12	19	Strengths: Have understood the concepts well and teaches the

		(12.08.2019)				<p>concepts to caregivers effectively</p> <p>Improvement points:</p> <p>Suggest to manage time effectively</p>
		<p>Session 09</p> <p>(07.02.2020)</p>	04	12	16	<p>Strengths: Good level of interactions with participants</p> <p>Improvement points: Speaking too softly</p>
Kandupalatha	<p>Chandrani Pushpa Kumari</p> <p>Swarna Kumari</p>	<p>Session 02</p> <p>(18.10.2019)</p>	02	09	15	<p>Strengths: Maintains equality among participants</p> <p>Explanations are simple and easy to understand</p> <p>Improvement points:</p> <p>Speaking too softly</p>
		<p>Session 04</p> <p>(09.11.2019)</p>	03	11	13	<p>Strengths: Can maintain the attention of the audience, ability to work with a team</p> <p>Improvement points: Suggest to refrain from being dominant and being aggressive</p>

		Session 08 (02.02.2020)	04	13	17	Strengths: Familiar with the facilitator's hand book Improvement points: Suggest to use examples when explaining concepts
Wanduressa	Inoka Rajapaksha Champika Hettiarachchi	Session 01 (14.10.2019)	03	11	13	Strengths: Teaches the concepts and encourages responses from the participants Improvement points: Suggest to refrain from being dominant and being aggressive
		Session 06 (23.11.2019)	04	13	17	Strengths: Good level of interactions with the participants Improvement Points: Time management, especially when explaining things
		Session 10 (24.02.2020)	04	11	18	Strengths: Maintains a good relationship with the participants Improvement points: Suggest improve prior preparations

Nethulpitiya	Kumari Wijesinghe Nirosha Dilrukshi	Session 01 (28.08.20 19)	04	11	15	Strengths: Ability to maintain attention of the participants and gets everybody engaged with the session Improvement points: Suggest to build rapport with the participants
		Session 05 (22.11.20 19)	04	11	16	Strengths: Ability to effectively manage all the participants Improvement points: Should prepare for the session as indicated in the manual
		Session 09	04	14	16	Strengths: Friendly and have a good relationship with the participants Improvement points: Suggest to allocate more time to discuss examples and personal experiences
Chankanai						
Kaddupulam	J.Eeswary		04	13	15	Strengths: “She has a personal attachment with each participant. She understands the issues well”

						Improvement points: Suggest to give more information on the areas discussed
Chulipuram West - Varutholai	Kamalava thy. k		05	10	20	Strengths: Gave real life example to explain a concept Understanding of the background of the participants Good presentation skills Promoted and encouraged participants when they answer questions Improvement points: None
Moolai	Luxmy Devi	(08.02.20 19)	05	15	20	Strengths: Well experienced and therefore have knowledge Improvement points: None

 ANNEXURE F- RESPONSIVE FEEDING

Responsive Feeding- Frequencies of Intervention Group

Responsive Feeding		Baseline n (%)			Endline n(%)		
Item		agree (1)	neutral (2)	Disagree (3)	agree (1)	neutral (2)	Disagree (3)
RF1	It is important to smile and look at the infant's face while feeding	378 (98.7)	05 (1.3)	00 (00)	312 (98.4)	04 (1.3)	01 (0.3)
RF2	Teach the child to eat patiently and lovingly	366 (95.6)	10 (2.6)	07 (1.8)	317 (99.4)	01 (0.3)	01 (0.3)
RF3	Actively help the child to eat	374 (97.7)	07 (1.8)	02 (0.5)	318 (99.7)	01 (0.3)	00 (00)
RF4	Help the child but do not use physical restraint while feeding	314 (82.0)	11 (2.9)	58 (15.1)	310 (97.2)	05 (1.6)	04 (1.3)
RF5	Praise / encourage child to eat and give positive comments	355 (92.7)	12 (3.1)	16 (4.2)	317 (99.4)	02 (0.6)	00 (00)
RF6	Respond to child refusal by waiting and offering one more bite	351 (91.6)	10 (2.6)	22 (5.7)	290 (91.5)	13 (4.1)	14 (4.4)

RF7	Encourage experience with self-feeding or give finger foods	341 (89.0)	23 (6.0)	19 (5.0)	310 (97.2)	07 (2.2)	02 (0.6)
RF8	My child should always eat all of the food on his/her plate.	263 (68.8)	51 (13.4)	68 (17.8)	241 (75.5)	33 (10.3)	45 (14.1)
RF9	If my child says, “I’m not hungry,” I try to get him/her to eat anyway.	289 (75.5)	32 (8.4)	62 (16.2)	230 (72.1)	26 (8.2)	63 (19.7)
RF10	If my child eats only a small helping, I try to get him/her to eat more.	311 (81.6)	29 (7.6)	41 (10.8)	277 (86.8)	16 (5.0)	26 (8.2)
RF11	If I did not guide or regulate my child’s eating, s/he would eat too much of his/her favourite foods.	241 (62.9)	58 (15.1)	84 (21.9)	212 (66.5)	19 (6.0)	88 (27.6)
RF12	If I did not guide or regulate my child’s eating, he/she would eat too many junk foods.	238 (62.1)	51 (13.3)	94 (24.5)	195 (61.1)	22 (6.9)	102 (32.0)
RF13	I have to be sure that my child does not eat too much of his/her favourite foods.	227 (59.3)	46 (12.0)	110 (28.7)	293 (91.8)	16 (5.0)	10 (3.1)

PILOT RF14	Respond promptly when child expresses hunger;				304 (97.4)	06 (1.9)	02 (0.6)
PILOT RF15	Talk about food that the child is eating;				307 (98.4)	03 (1.0)	02 (0.6)
PILOT RF16	Reduce distractions when child is eating (eg Noise, TV);				294 (94.2)	11 (3.5)	07 (2.2)
PILOT RF17	Say something positive about child's eating				245 (78.5)	21 (6.7)	46 (14.7)

Responsive feeding- Frequencies of Control Group

Responsive Feeding		Baseline n (%)			Endline n(%)		
Item		agree (1)	neutral (2)	Disagree (3)	agree (1)	neutral (2)	Disagree (3)
RF1	It is important to smile and look at the infant's face while feeding	300 (98.7)	04 (1.3)	00 (00)	219 (99.1)	02 (0.9)	00 (00)
RF2	Teach the child to eat patiently and lovingly	296 (97.4)	06 (2.0)	02 (0.7)	218 (98.2)	01 (0.5)	03 (1.4)

RF3	Actively help the child to eat	293 (96.4)	10 (3.3)	01 (0.3)	221 (99.5)	01 (0.5)	00 (00)
RF4	Help the child but do not use physical restraint while feeding	243 (79.9)	14 (4.6)	47 (15.5)	212 (95.5)	04 (1.8)	06 (2.7)
RF5	Praise / encourage child to eat and give positive comments	285 (93.8)	12 (3.9)	07 (2.3)	221 (99.5)	00 (0.0)	01 (0.5)
RF6	Respond to child refusal by waiting and offering one more bite	268 (88.2)	16 (5.3)	20 (6.6)	186 (83.8)	11 (5.0)	25 (11.3)
RF7	Encourage experience with self-feeding or give finger foods	269 (88.5)	18 (5.9)	17 (5.6)	218 (98.2)	01 (0.5)	03 (1.4)
RF8	My child should always eat all of the food on his/her plate.	200 (65.8)	48 (15.8)	56 (18.4)	114 (51.4)	32 (14.4)	76 (34.2)
RF9	If my child says, ‘‘I’m not hungry,’’ I try to get him/her to eat anyway.	227 (74.7)	27 (8.9)	50 (16.4)	121 (54.5)	32 (14.4)	69 (31.1)
RF10	If my child eats only a small helping, I try to get him/her to eat more.	235 (77.3)	37 (12.2)	32 (10.5)	163 (73.4)	18 (8.1)	41 (18.5)

RF11	If I did not guide or regulate my child's eating, s/he would eat too much of his/her favourite foods.	190 (62.7)	46 (15.2)	67 (22.1)	159 (71.6)	10 (4.5)	53 (23.9)
RF12	If I did not guide or regulate my child's eating, he/she would eat too many junk foods.	185 (61.1)	42 (13.9)	76 (25.1)	160 (72.1)	09 (4.1)	53 (23.9)
RF13	I have to be sure that my child does not eat too much of his/her favourite foods.	181 (59.5)	40 (13.2)	83 (27.3)	208 (93.7)	05 (2.3)	09 (4.1)
PILOT RF14	Respond promptly when child expresses hunger;				215 (98.2)	03 (1.4)	01 (0.5)
PILOT RF15	Talk about food that the child is eating;				214 (96.4)	07 (3.2)	01 (0.5)
PILOT RF16	Reduce distractions when child is eating (eg Noise, TV);				193 (87.7)	11 (5.0)	16 (7.3)
PILOT RF17	Say something positive about child's eating				212 (95.5)	00 (0.0)	10 (4.5)

ANNEXURE G - STUDY INSTRUMENTS

Caregiver Questionnaire

Caregiver Survey Questionnaire

(Early Childhood Development program pilot testing in WVL)

Information to interviewer on respondents;

This Survey Questionnaire is prepared for the caregivers. The enumerators should ask the questions from primary caregivers of children 6-24 months old. The primary caregiver is the person who spends the most amount of the time to take care of the child. Usually the primary caregiver is the mother of the child. But sometimes some others could also be the primary caregivers such as the father, grand mother, aunt, sister etc. Make sure that you clearly explain the purpose of this survey for the respondent. Do not give promises on benefits they might receive through the programme or persuade them to respond to the questionnaire reminding the rewards they might receive.

Introduction :

I am a volunteer representing World Vision for this caregiver survey. The purpose of this household survey is to collect information on the household and children, which enables decision making for the successful implementation of the programme focused on the well-being of very young children. Your household has been randomly selected for this survey. This interview is voluntary. You can ask to repeat if the questions are not clear enough. The feedback will be recorded in the form. Individual level information will be handled confidentially and your individual information will not be disclosed to any other parties. The overall result of this data collection will be written in a report, and the name of respondent or any other personal data will not be included in the report. This survey will take nearly 60 minutes.

Do you like to participate in this survey?

Yes, I would like to participate

No, I don't like.

Reason why the respondent doesn't want to participate

No time

No Interest

Doesn't like

Other.....

If Yes

Name of the respondent ;

Age:

Sex:

Relationship with the child :

Father, b. Mother c. Aunt d. Uncle e. Grand mother, f. Grand father

Other

Were you the respondent of the baseline survey?

Yes

No

Were you the person who attended the intervention sessions? (Note to interviewer: For control group refer the GBG sessions and CH&N sessions; For Control group refer to Ch&N session)

Yes

No

If not who did?.....

1. Date of surveyDD/MM/2019
2. Start-up time at.....
3. Finished at ;
4. Participant code (select from the list):

Now, I'm going to ask you some information regarding your child

2. Child Information Details of the Child (*Please refer the Child Health and Development Record to fill the information*)

<i>Question</i>		<i>Possible Responses</i>	<i>Recording</i>
CI1.	Name of the Child		
CI2.	Date of Birth	DD/MM/201X
CI.3	Sex	1. <i>Male</i> 2. <i>Female</i>	<input type="checkbox"/> <input type="checkbox"/>

Now I'd like to ask you some information regarding what kind of things you do with your child

3. Early Stimulation & Learning

Question		Possible Responses	Recording																												
ES1	<p>In the past 3 days, did you or any household member age 15 or over engage in any of the following activities with (name):</p> <p>If 'Yes', ask:</p> <p>Who engaged in this activity with (name)?</p> <p>Circle all that apply.</p>	<p>1. READ BOOKS</p> <p>2. TOLD STORIES</p> <p>3. SANG SONGS</p> <p>4. TOOK OUTSIDE FOR LEASUIRE WALK</p> <p>5. PLAYED WITH</p> <p>6. NAMED OBJECTS/THINGS TOGETHER WITH THE CHILD</p> <p>(to be calculated by the interviewer)</p> <p>1-5 interactions</p> <p>6-10 interactions</p> <p>10-18 interactions</p> <p>No interactions</p>	<table border="1"> <thead> <tr> <th></th> <th>MOTHE R</th> <th>FATHER</th> <th>OTHE R</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>A</td> <td>B</td> <td>X</td> </tr> <tr> <td>2</td> <td>A</td> <td>B</td> <td>X</td> </tr> <tr> <td>3</td> <td>A</td> <td>B</td> <td>X</td> </tr> <tr> <td>4</td> <td>A</td> <td>B</td> <td>X</td> </tr> <tr> <td>5</td> <td>A</td> <td>B</td> <td>X</td> </tr> <tr> <td>6</td> <td>A</td> <td>B</td> <td>X</td> </tr> </tbody> </table> <p>Record total number of interactions overall</p> <p><input type="checkbox"/></p> <p><input type="checkbox"/> 1</p> <p><input type="checkbox"/> 2</p> <p><input type="checkbox"/> 3</p>		MOTHE R	FATHER	OTHE R	1	A	B	X	2	A	B	X	3	A	B	X	4	A	B	X	5	A	B	X	6	A	B	X
			MOTHE R	FATHER	OTHE R																										
1	A	B	X																												
2	A	B	X																												
3	A	B	X																												
4	A	B	X																												
5	A	B	X																												
6	A	B	X																												

			<input type="checkbox"/> 0
ES2	How many children's books or picture books do you have in your home for your young child?	None Less than 3 3 or more books	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2
ES3	Does (he/she) play with: (choose all that apply) [A]Homemade toys, such as dolls, cars, or other toys made at home? [B] Toys from a shop or manufactured toys? [C]Household objects, such as bowls or pots, or objects found outside, such as sticks, rocks,	Homemade toys Toys from a shop Household objects or outside objects	<input type="checkbox"/> 1 yes <input type="checkbox"/> 0 no <input type="checkbox"/> 88 Don't know <input type="checkbox"/> 1 yes <input type="checkbox"/> 0 no <input type="checkbox"/> 88 Don't know <input type="checkbox"/> 1 yes <input type="checkbox"/> 0 no <input type="checkbox"/> 88 Don't know

		<p>4-No time spent with my child</p> <p>88 - Don't know</p>	
ES4	<p>HOW MUCH TIME DO YOU OR ANY MEMBER OF YOUR HH USUALLY SPEND WITH YOUR CHILD?</p>	<p>TALKING/PLAYING/READING/ SINGING/ DRAWING DURING A DAY</p>	<p>..... minutes</p>
ES5	<p>ON AN AVERAGE WEEKDAY ABOUT HOW MUCH TIME DOES CHILD USUALLY SPEND IN FRONT OF SCREEN</p>	<p>(TV, COMPUTER, TABS, PHONE FOR WATCHING TV PROGRAMS, VIDEOS OR PLAYING VIDEO GAMES</p>	<p>.....minutes</p>

ES6	<p>DOES THE CHILD GO TO ANY ORGANIZED LEARNING OR EARLY CHILDHOOD EDUCATION PROGRAMME?</p> <p>(Those who attended a preschool prior to curfew and stopped because of the COVID situation, should be taken as a “yes”)</p>	SUCH AS A PRE SCHOOL	<p>1.Yes</p> <p>2. No</p>
------------	---	----------------------	---------------------------

I'd like to ask you some information regarding how you interact with your child

4.Caregiver & Child Interaction Questionnaire (Short version of Brigance)

<i>Question</i>	<i>Possible Responses</i>	<i>Recording</i>
-----------------	---------------------------	------------------

1	I play with my child and show him or her things about toys.	a. Not very often b. Sometimes c. Often	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
2	I mostly talk to my child when he or she is upset (Note to the interviewer: whether caregiver usually only talks to the child when the child is upset)	a. Not very true, b. Sometimes true; c. Mostly true,	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
3	I help my child learn by talking and showing him or her new things.	a. Not Very true. b. Sometimes true. c. Mostly true.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
4	I look at or read children's books to my child	a. Not very often b. Sometimes c. Often	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

5	When my child looks at or touches a toy, I talk to him about the toy.	a. Not very often b. Sometimes c. Often	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
6	I talk to my child in a special way (ex. In a warm, positive, tone, loving way different than to other kids or other people).	a. Not very often b. Sometimes c. Often	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
7	My child is not very much fun to be with.	a. Not Very true. b. Sometimes true. c. Mostly true.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
8	When my child looks at or touches something, the first thing I say is “don’t or no”. (Note to the interviewer: Mother generally says “no” to the child, at all times, irrespective of the object)	a. Not Very true. b. Sometimes true. c. Mostly true.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

9	Most of the time I like my child.	a. Not Very true. b. Sometimes true. c. Mostly true.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
10	My child does not need my help learning new things.	a. Not Very true. b. Sometimes true. c. Mostly true.	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

Now i would like to ask you some questions regarding the things you child does

5. CREDI-106 items see annexure 1

Now, i would like to ask you some questions regarding how you try to discipline the child

06. Child Protection

<i>Question</i>		<i>Possible Responses</i>	<i>Recording</i>
CP1	Please tell me if you or any other adult in your household has used this method with (name) in the past month to discipline or teach the child correct behaviours	<p><i>Read the following options & select all that apply....</i></p> <p>CP1.1 Hit him/ her (punched, kicked, beat with object):</p> <p>Yes</p> <p>No</p> <p>Not Sure</p> <p>CP1.2 Explained why something was wrong:</p> <p>Yes</p> <p>No</p> <p>Not Sure</p> <p>CP1.3 Called him/her lazy or dumb or another name:</p> <p>Yes</p> <p>No</p> <p>Not Sure</p>	<p><input type="checkbox"/> 0</p> <p><input type="checkbox"/> 1</p> <p><input type="checkbox"/> 88</p> <p><input type="checkbox"/> 1</p> <p><input type="checkbox"/> 0</p> <p><input type="checkbox"/> 88</p> <p><input type="checkbox"/> 0</p> <p><input type="checkbox"/> 1</p>

		<p>CP1.4 Consistent boundary setting & instruction:</p> <p>Yes</p> <p>No</p> <p>Not Sure</p>	<input type="checkbox"/> 88
		<p>CP1.5 Hit or slapped (with hand):</p> <p>Yes</p> <p>No</p> <p>Not Sure</p>	<input type="checkbox"/> 1 <input type="checkbox"/> 0 <input type="checkbox"/> 88
		<p>CP1.6 Shook him/her:</p> <p>Yes</p> <p>No</p> <p>Not Sure</p>	<input type="checkbox"/> 0 <input type="checkbox"/> 1
		<p>CP1.7 Provided positive reinforcement for good behaviour:</p> <p>Yes</p> <p>No</p> <p>Not Sure</p>	<input type="checkbox"/> 88 <input type="checkbox"/> 0 <input type="checkbox"/> 1

			<input type="checkbox"/> 88 <input type="checkbox"/> 1 <input type="checkbox"/> 0 <input type="checkbox"/> 88
CP2	<p>Sometimes adults taking care of children have to leave the house to go shopping, wash clothes, work, or for other reasons.</p> <p>How many days in the past week did you leave your young child (0 – 3 years) alone or in the care of a young child who is less than 10 years</p>	<p>Did not leave young child unattended</p> <p>1 or more days</p> <p>Not sure</p>	<input type="checkbox"/> 1 <input type="checkbox"/> 0 <input type="checkbox"/> 88

	of age, for more than an hour?		
CP3	Who takes care of your children when you are at work or have to leave the house?	<p><i>Select all that apply....</i></p> <p>CP3.1 Mother:</p> <p>Yes <input type="checkbox"/> 1</p> <p>No <input type="checkbox"/> 0</p> <p>Not Sure <input type="checkbox"/> 88</p> <p>CP3.2 Father:</p> <p>Yes <input type="checkbox"/> 1</p> <p>No <input type="checkbox"/> 0</p> <p>Not Sure <input type="checkbox"/> 88</p> <p>CP3.3 Older sibling (under 15):</p> <p>Yes <input type="checkbox"/> 1</p> <p>No <input type="checkbox"/> 0</p> <p>Not Sure <input type="checkbox"/> 88</p> <p>CP3.4 Older sibling (over 15):</p> <p>Yes <input type="checkbox"/> 1</p> <p>No <input type="checkbox"/> 0</p>	Not scored

		<p>Not Sure</p> <p>CP3.5 Grandparent:</p> <p>Yes</p> <p>No</p> <p>Not Sure</p> <p>CP3.6 Other trusted adult or family member over 15:</p> <p>Yes</p> <p>No</p> <p>Not Sure</p>	<p><input type="checkbox"/> 88</p> <p><input type="checkbox"/> 1</p> <p><input type="checkbox"/> 0</p> <p><input type="checkbox"/> 88</p> <p><input type="checkbox"/> 1</p> <p><input type="checkbox"/> 0</p> <p><input type="checkbox"/> 88</p>
	<p>Due to the lockdown/curfew imposed for the COVID virus, do you feel like you punish or scold your child more than other days?</p>	<p>0-Not true, I did not punish or scold my child more during the curfew than other days</p> <p>1-All the time, I punish or scold my child more now during the curfew compared to before</p> <p>2-Most of the time I punish or scold my child more during the curfew</p>	<p><input type="checkbox"/> 0</p> <p><input type="checkbox"/> 1</p> <p><input type="checkbox"/> 2</p> <p><input type="checkbox"/> 3</p> <p><input type="checkbox"/> 88</p>

		<p>3-Some time I punish or scold my child more during the curfew than other days</p> <p>88- Don't know</p>	
--	--	--	--

Now, I would like to ask you some questions regarding the breastfeeding practices

7. **BREASTFEEDING** Information

Question		Possible Responses	Recording
BF05.	Is (name) still receiving breast milk?	<p>1 = Yes (if 'yes', skip to questionsRF1)</p> <p>0 = No (go to BF06)</p> <p>88 = Don't Know/No response (if 'don't know/no response', skip to next section)</p>	<input type="checkbox"/> 1 <input type="checkbox"/> 0 <input type="checkbox"/> 88
BF06.	How old was (name) when he or she stopped taking breast milk?months

		2 Don't know	<input type="checkbox"/>
--	--	--------------	--------------------------

Now, I would like to ask you some information regarding the your beliefs and interactions with the child during feeding

8. Responsive feeding

These questions focus on the intraction between you and your child during mealtimes. Select the option that correctly describes your perceptions. If you are uncertain of your answer, select the option that you feel is most appropriate

		Strongly agree	agree	neutral	Disagree	Strongly Disagree
RF1	It is important to smile and look at the infant's face while feeding					
RF2	Teach the child to eat patiently and lovingly					
RF3	Actively help the child to eat					
RF4	Help the child but do not use physical restraint while feeding					

RF5	Praise / encourage child to eat and give positive comments					
RF6	Respond to child refusal by waiting and offering one more bite					
RF7	Encourage experience with self-feeding or give finger foods					
RF8	My child should always eat all of the food on his/her plate.					
RF9	If my child says, ‘I’m not hungry,’ I try to get him/her to eat anyway.					
RF10	If my child eats only a small helping, I try to get him/her to eat more.					
RF11	If I did not guide or regulate my child’s eating, s/he would eat too much of his/her favourite foods.					
RF12	If I did not guide or regulate my child’s eating, he/she would eat too many junk foods.					

RF13	I have to be sure that my child does not eat too much of his/her favourite foods.					
PILOT RF14	Respond promptly when child expresses hunger;					
PILOT RF15	Talk about food that the child is eating;					
PILOT RF16	Reduce distractions when child is eating (eg Noise, TV);					
PILOT RF17	Say something positive about child's eating					

Now, i would like some information regarding the people involved in feeding the child

9.COMPLEMENTARY FEEDING

CF01.	who is usually feeding the child at home during day time?	1. Father 2. Mother 3. Grandpar ents 4. Siblings	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
-------	---	--	--

		5. Eat him/herse lf 6. Domestic Helper 7. Other	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
CF02.	who is usually feeding the child at home during dinner time?	1. Father 2. Mother 3. Grandpar ents 4. Siblings 5. Eat him/herse lf 6. Domestic Helper 7. Other	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
CF03.	<i>Who mainly decides what [child's name] should and should not eat?</i>	1. Father 2. Mother 3. Grandpare nts 4. Siblings 5. Eat him/hersel f	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

		6. Domestic Helper 7. Other	<input type="checkbox"/>
--	--	--------------------------------	--------------------------

10. Minimum Dietary Diversity

The next few questions are about any food that (name) may have had yesterday, during the day or night. We would also like to talk to you regarding the changes that may have occurred due to the COVID/Curfew situation in the country.

Now I would like to ask you about (other) liquids or foods than breast milk that (name) have had yesterday during the day or at night. I am interested in whether your child had the item even if it was combined with other foods.

MD1	Was yesterday a normal or a regular day for your Child?	1. Normal day 2. Had a function 3. Eat from out (one or all three meals)	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>
MD2	Rice & rice flour products (boiled rice, foods made with rice flour (string hoppers, hoppers, pittu etc.)?)	0 = No 1 = Yes 88 = Don't Know/remember	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 88

MD3	Wheat & Wheat flour products (Bread, buns, string hoppers, rotti, pittu etc.)	0 = No 1 = Yes 88 = Don't Know/ remember	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 88
MD4	other grains or products (maize, millet)	0 = No 1 = Yes 88 = Don't Know/ remember	<input type="checkbox"/> 0 <input type="checkbox"/> <input type="checkbox"/>
MD5	Roots and tubers (Potatoes, manioc, Kiri ala, white sweet potato)	0 = No 1 = Yes 88 = Don't Know/ remember	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 88
MD6	legumes and pulses (Cowpea, green gram, black gram, chick peas, Soya beans, dhal, lentils,)	0 = No 1 = Yes 88 = Don't Know/ remember	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 88

MD7	seeds/nuts (cashew nut, peanuts, coconut (grated/milk), sesame seeds and oil and other nuts)	0 = No 1 = Yes 88 = Don't Know/ remember	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 88
MD8	Milk & milk product (liquid milk, Curd, yoghurt, cheese, , Ice cream , flavoured milk , ghee, butter)	0 = No 1 = Yes 88 = Don't Know/ remember	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 88
MD9	Chicken or poultry	0 = No 1 = Yes 88 = Don't Know/ remember	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 88
MD10	If No/Don't know, Did he/she eat during the week?	0 = No 1 = Yes 88 = Don't Know/ remember	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 88
MD11	Other Meats (mutton, beef, pork, liver/organ meat etc)	0 = No	<input type="checkbox"/> 0

		1 = Yes 88 = Don't Know/ remember	<input type="checkbox"/> 1 <input type="checkbox"/> 88
MD12	If No/Don't know, Did he/she eat during the week?	0 = No 1 = Yes 88 = Don't Know/ remember	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 88
MD13	Fish and other Seafoods (Fish/canned fish /fresh sprats/ other seafoods)	0 = No 1 = Yes 88 = Don't Know/ remember	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 88
MD14	If No/Don't know , Did he/she eat during the week?	0 = No 1 = Yes 88 = Don't Know/ remember	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 88
MD15	Dried fish /Dried Sprats)	0 = No 1 = Yes	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 88

		88 = Don't Know/ remember	
MD16	If No/Don't know , Did he/she eat during the week?	0 = No 1 = Yes 88 = Don't Know/ remember	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 88
MD17	Eggs (Any eggs)	0 = No 1 = Yes 88 = Don't Know/ remember	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 88
MD18	If No/Don't know , Did he/she eat during the week?	0 = No 1 = Yes 88 = Don't Know/ remember	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 88
MD19	Ripe Papaya, Ripe Mango (Vitamin A rich fruits)	0 = No 1 = Yes 88 = Don't Know/ remember	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 88

MD20	If No/Don't know , Did he/she eat during the week?	0 = No 1 = Yes 88 = Don't Know/ remember	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 88
MD21	yellow/ orange pumpkin, carrot, yellow sweet potatoes (Vitamin A rich vegetables)	0 = No 1 = Yes 88 = Don't Know/ remember	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 88
MD22	If No/Don't know , Did he/she eat during the week?	0 = No 1 = Yes 88 = Don't Know/ remember	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 88
MD23	Green leafy vegetables (Murunga leaf, gottukola, Mukunuwenna, kankun, kathurumurunga etc,)	0 = No 1 = Yes 88 = Don't Know/ remember	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 88
MD24	If No/Don't know , Did he/she eat during the week?	0 = No	<input type="checkbox"/> 0

		1 = Yes 88 = Don't Know/ remember	<input type="checkbox"/> 1 <input type="checkbox"/> 88
MD25	Other fruits (Banana, orange, guawa, etc.)	0 = No 1 = Yes 88 = Don't Know/ remember	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 88
MD26	other vegetables (Ladies finger, drum stick, cabage, brinjol, etc.,)	0 = No 1 = Yes 88 = Don't Know/ remember	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 88

MD27	Baby foods (cerelac, nestum, Thriposha, samaposha etc..)	0 = No 1 = Yes	<input type="checkbox"/> 0 <input type="checkbox"/> 1
------	--	-----------------------	--

		88 = Don't Know/ remember	<input type="checkbox"/> 88
MD28	Infant formula (Nan, Pedipro, lactogen, Enfalac etc...)	0 = No 1 = Yes 88 = Don't Know/ remember	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 88
MD29	Milk such as tinned, powdered,	0 = No 1 = Yes 88 = Don't Know/ remember	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 88
MD30	Tea or coffee?	0 = No 1 = Yes 88 = Don't Know/ remember	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 88
MD31	Biscuits	0 = No 1 = Yes 88 = Don't Know/ remember	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 88

MD32	Sugary drinks such as sodas or fruit juices? Cola/sugar sweetened beverages	0 = No 1 = Yes 88 = Don't Know/ remember	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 88
MD33	Drink Water	0 = No 1 = Yes 88 = Don't Know/ remember	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 88
MD34	chocolate bars, candies, chips, Murukku	0 = No 1 = Yes 88 = Don't Know/ remember	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 88
MD35	Do you think because of the lockdown/curfew your <u>child's diet</u> changed?.	0=No 1=Yes 88=Don't know	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 88

PILOT MD36	During the lockdown how did the child's consumption of the following change	Rice	<input type="checkbox"/> 0
		0 Ate less	<input type="checkbox"/> 1
	Rice	1= Ate more	<input type="checkbox"/> 88
		88= Don't know	
	Fish	Fish	<input type="checkbox"/> 0
		0 Ate less	<input type="checkbox"/> 1
	Meat	1= Ate more	<input type="checkbox"/> 88
		88= Don't know	
	Vegetables	Meat	<input type="checkbox"/> 0
		0 Ate less	<input type="checkbox"/> 1
	Fruits	1= Ate more	<input type="checkbox"/> 88
		88= Don't know	
	Milk	Vegetables	<input type="checkbox"/> 0
		0 Ate less	<input type="checkbox"/> 1
	Biscuits or other snacks	1= Ate more	<input type="checkbox"/> 88
		88= Don't know	
		Fruits	<input type="checkbox"/> 0
		0 Ate less	<input type="checkbox"/> 1
		1= Ate more	<input type="checkbox"/> 88

		88= Don't know Milk 0 Ate less 1= Ate more 88= Don't know Biscuits or other snacks 0 Ate less 1= Ate more 88= Don't know	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 88 <input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 88
MD37	<p>Do you think that because of the lockdown/curfew <u>your diet's</u> quality changed?</p> <p>(Note to the interviewer.</p> <p>Explain to the participant that what is meant by "quality" here is a hygienically prepared wholesome diet with a source of carbohydrate, protein, vitamins, minerals and oil/fat)</p> <p>Fast food of any kind is not considered quality food.)</p>	0=No 1=Yes 88=Don't know	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 88

MD38	How did it change	0=Quality reduced 1=Quality improved	<input type="checkbox"/> 0 <input type="checkbox"/> 1
------	-------------------	---	--

11.MINIMUM MEAL FREQUENCY

Proportion of children receiving a minimum meal frequency

The next few questions are about any meals or snacks that (name) may have had yesterday, during the day or night.

MM1	<p>Did (name) eat any solid, semi-solid or soft foods <u>yesterday, during the day or night?</u></p> <p>1 = Yes</p> <p>0 = No (if 'no', skip to next section RF 1)</p> <p>88 = Don't Know/remember (if 'don't know/remember', skip to RF 1)</p>	<p><input type="checkbox"/> 0</p> <p><input type="checkbox"/> 1</p> <p><input type="checkbox"/> 88</p>
MM 2	<p>How many times did (name) have a meal yesterday, during the day or night?</p> <p><i>If respondent doesn't know, write 88. ANYTIME THAT THEY CHILD HAD MILK THAT WAS NOT BREASTMILK (infant formula, tinned, powdered or animal milk) SHOULD NOT BE RECORDED HERE. Instead this information is recorded in a separate question below.</i></p>	<p>.....</p> <p><input type="checkbox"/> 88</p>

MM3	<p>How many times did (name) have a snack yesterday, during the day or night?</p> <p><i>If respondent doesn't know, write 88. ANYTIME THAT THEY CHILD HAD MILK THAT WAS NOT BREASTMILK (infant formula, tinned, powdered or animal milk) SHOULD NOT BE RECORDED HERE. Instead this information is recorded in a separate question below.</i></p>	<p>.....</p> <p><input type="checkbox"/> 88</p>
MM4	<p>How many times did (NAME) drink infant formula yesterday, during the day or night?</p> <p><i>Write number of times. If respondent doesn't know, write 88</i></p>	<p>.....</p> <p><input type="checkbox"/> 88</p>
MM5	<p>How many times did (NAME) drink milk, such as tinned, powdered or fresh animal milk yesterday during the day or night?</p> <p><i>Write number of times. If respondent doesn't know, write 88</i></p>	<p>.....</p> <p><input type="checkbox"/> 88</p>
MM6	<p>Do you think because of the lockdown/curfew your child's diet changed in quantity?</p> <p>0-No</p> <p>1-Yes</p> <p>88-Don't know</p>	<p><input type="checkbox"/> 0</p> <p><input type="checkbox"/> 1</p> <p><input type="checkbox"/> 88</p>

MM7	How did it change 0-Quantity reduced 1-Quantity improved	<input type="checkbox"/> 0 <input type="checkbox"/> 1
PILOT MM8	Have you experienced difficulty in buying groceries or any other food stuff during this time? 0-No 1-Sometimes 2- Most of the time 88- Don't know	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 88

PILOT MM9	Have you experienced difficulty in getting groceries food stuff delivered to your home during this time? 0-No 1-Sometimes 2- Most of the time 88- Don't know 88- Don't know	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 88
------------------	---	---

PILOT MM10	Has your child missed meals because of the lockdown/curfew during this time?	<input type="checkbox"/> 0
	0-No	<input type="checkbox"/> 1
	1-Sometimes	<input type="checkbox"/> 2
	2- Most of the time	<input type="checkbox"/> 88
	88- Don't know	

Now, I would like to ask you about the measures you have taken to promote health

12: Health protection and promotion behaviours

HP1	Do you wash your child's hands more since the COVID virus outbreak?	1-Yes	<input type="checkbox"/> 0
		0-No	<input type="checkbox"/> 1

		88-Don't know	<input type="checkbox"/> 88
HP2	<p>Can you state when you wash <u>your child's hands</u>?</p> <p>(Note to the interviewer: Let the participant give the answer to the question and tick out relevant options. Do not read out the options to the participant)</p>	<p>HP2.1 Before meals</p> <p>Yes <input type="checkbox"/> 1</p> <p>No <input type="checkbox"/> 0</p> <p>Not sure <input type="checkbox"/> 88</p> <p>HP2.2 After outdoor play</p> <p>Yes <input type="checkbox"/> 0</p> <p>No <input type="checkbox"/> 88</p> <p>Not sure</p> <p>HP2.3 After using sanitation facilities</p> <p>Yes <input type="checkbox"/> 0</p> <p>No <input type="checkbox"/> 88</p> <p>Not sure</p> <p>HP2.4 After handling faeces</p> <p>Yes <input type="checkbox"/> 0</p>	

		<p>No</p> <p>Not sure</p> <p>HP2.5 After handling livestock</p> <p>Yes</p> <p>No</p> <p>Not sure</p>	<p><input type="checkbox"/> 88</p> <p><input type="checkbox"/> 1</p> <p><input type="checkbox"/> 0</p> <p><input type="checkbox"/> 88</p>
HP3	<p>Can you state when you wash <u>your own hands</u>?</p> <p>(Note to the interviewer: Let the participant give the answer to the question and tick out relevant options. Do not read out the options to the participant)</p>	<p>HP3.1 Before meals</p> <p>Yes</p> <p>No</p> <p>Not sure</p> <p>HP3.2 After outdoor play</p> <p>Yes</p> <p>No</p> <p>Not sure</p> <p>HP3.3 After using sanitation facilities</p>	<p><input type="checkbox"/> 1</p> <p><input type="checkbox"/> 0</p> <p><input type="checkbox"/> 88</p> <p><input type="checkbox"/> 1</p> <p><input type="checkbox"/> 0</p> <p><input type="checkbox"/> 88</p>

		Yes No Not sure	<input type="checkbox"/> 1 <input type="checkbox"/> 0 <input type="checkbox"/> 88
		HP3.4 After handling faeces Yes No Not sure	<input type="checkbox"/> 1 <input type="checkbox"/> 0 <input type="checkbox"/> 88
		HP3.5 After handling livestock Yes No Not sure	<input type="checkbox"/> 1 <input type="checkbox"/> 0 <input type="checkbox"/> 88
HP4	During the last 24 hours, what did you wash your hands with? Note: open water = water that is stagnant where hands are	1 = Washed hands with running water and soap 2 = Washed hands with running water and ash 3 = Washed hands with running water only	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>

	dipped into basin or other open water source	4 = Did not wash hands 5= Washed hands with open water and soap 6= Washed hands with open water and ash 7= Washed hands with open water only	<input type="checkbox"/> <input type="checkbox"/>
HP5	Do you clean your house more since the COVID virus outbreak?	1-Yes 0-No 88-Don't know	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 88
PILOT HP6	What do you do differently? (Note to the interviewer: Let the participant give the answer to the question and tick out relevant options. Do not read out the options to the participant	1=Sweep more times 2=Mop the floor more times 3=Clean surfaces (door handles, table tops etc) 4=Other (_____) 88=Don't know	<input type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> 88
HP7	Can you state at least 3 ways to keep the household	HP6.1 Proper disposal of faeces Yes	<input type="checkbox"/> 1

<p>environment clean to protect children from diarrhoea</p> <p>(Note to the interviewer: Let the participant give the answer to the question and tick out relevant options. Do not read out the options to the participant)</p>	No	<input type="checkbox"/> 0
	Not sure	<input type="checkbox"/> 88
	HP6.2 Handwashing	
	Yes	<input type="checkbox"/> 1
	No	<input type="checkbox"/> 0
	Not sure	<input type="checkbox"/> 88
	HP6.3 Removal of trash	
	Yes	<input type="checkbox"/> 1
	No	<input type="checkbox"/> 0
	Not sure	<input type="checkbox"/> 88
	HP6.4 Keeping animals out of indoor and play space	
	Yes	<input type="checkbox"/> 1
	No	<input type="checkbox"/> 0
	Not sure	<input type="checkbox"/> 88

		<p>HP6.5 Ensuring clean sanitation facilities</p> <p>Yes</p> <p>No</p> <p>Not sure</p>	<input type="checkbox"/> 1 <input type="checkbox"/> 0 <input type="checkbox"/> 88
		<p>HP6.6 Ensure access to clean water</p> <p>Yes</p> <p>No</p> <p>Not sure</p>	<input type="checkbox"/> 1 <input type="checkbox"/> 0 <input type="checkbox"/> 88
HP8	During the last two weeks, did your child have	<p>7.1 Diarrhoea</p> <p>0=No</p> <p>1=Yes</p> <p>88=Don't know</p> <p>7.2 Respiratory infections (cough)</p> <p>0=No</p> <p>1=Yes</p> <p>88=Don't know</p>	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 88 <input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 88

		7.3 Fever 0=No 1=Yes 88=Don't know	<input type="checkbox"/> 0 <input type="checkbox"/> 1 <input type="checkbox"/> 88
HP9	Is the participant from the intervention group?	No Yes	<input type="checkbox"/> 0 <input type="checkbox"/> 1

Now, I would like to ask you about your experience participating the GBG project

13. Monitoring

M1	Did you receive home visits by the facilitator?	1- Yes 0-No
M2	If yes, how many?
M3	Did you share the information you learnt with your family members?	1- Yes 0-No

M4	What do you think about the usefulness of the GBG intervention?	0-Not useful at all 1-Useful to some extent 2-Useful 3-Very useful
M5	What are the advantages in participating in this programme?	
M6	Can you mention a few key messages for the session? (Note to the interviewer: Let the participant mention key messages he/she remembers and tick out the suitable options given. Do not read out the options to the participant)	<input type="checkbox"/> Role of a caregiver <input type="checkbox"/> child development is holistic <input type="checkbox"/> sensitive and responsive care <input type="checkbox"/> Physical development or child <input type="checkbox"/> health <input type="checkbox"/> cognitive or brain development <input type="checkbox"/> social emotional development <input type="checkbox"/> play and how to communicate <input type="checkbox"/> home safety <input type="checkbox"/> how to discipline a child <input type="checkbox"/> Other (.....)

		<input type="checkbox"/> Don't know
M7	<p>What are the top three practices that you apply daily?</p> <p>(Note to the interviewer: Let the participant mention key messages he/she remembers and tick out the suitable options given. Do not read out the options to the participant)</p>	<input type="checkbox"/> Talking to the child <input type="checkbox"/> Playing with the child <input type="checkbox"/> Singing to the child <input type="checkbox"/> Spending time with the child <input type="checkbox"/> Going out for a walk <input type="checkbox"/> Ensure that hygiene is maintained <input type="checkbox"/> Proper nutrition <input type="checkbox"/> Positive disciplinary methods (not beating/yelling/criticizing) <input type="checkbox"/> Other (.....) <input type="checkbox"/> Don't know
M8	<p>What are the practices you have started due to COVID or curfew (rather than due to the intervention)?</p>	<input type="checkbox"/> Washing hands regular using hand rub, soap and water

	<p>(Note to the interviewer: Let the participant mention key messages he/she remembers and tick out the suitable options given. Do not read out the options to the participant)</p>	<input type="checkbox"/> Covering mouth and nose when coughing or sneezing <input type="checkbox"/> Avoid close contact with anyone who has a fever and cough <input type="checkbox"/> Wearing face masks <input type="checkbox"/> Maintaining the social distance <input type="checkbox"/> Staying at home <input type="checkbox"/> Body wash soon after returning home <input type="checkbox"/> Other (.....) <input type="checkbox"/> Don't know
M9	<p>This question is regarding your interactions with the child.</p> <p>What are the practices that you could not do due to COVID-19 or curfew?</p>	<input type="checkbox"/> Talking to the child <input type="checkbox"/> Playing with the child <input type="checkbox"/> Singing to the child

	<p>(Note to the interviewer: Let the participant mention key messages he/she remembers and tick out the suitable options given. Do not read out the options to the participant)</p>	<input type="checkbox"/> Spending time with the child <input type="checkbox"/> Going out for a walk <input type="checkbox"/> Ensure that hygiene is maintained <input type="checkbox"/> Proper nutrition <input type="checkbox"/> Positive disciplinary methods (not beating/yelling/ criticizing) <input type="checkbox"/> Other (.....) <input type="checkbox"/> Don't know
--	--	---

Now, I would like to ask you about how you felt during the past two weeks

14. PHQ-9 (Paper-based) - Annexure 2

Now, I would like to ask you some more questions regarding your feelings

15. Caregiver Situation – Warwick Edinburgh Mental Well-being Scale (Paper-based) -14 items

	Over the past two weeks how often have you been bothered by any of the following problems?	Non of the time	rarely	some of the time	often	All of the time
CS1	I've been feeling optimistic about the future					
CS2	I've been feeling useful					
CS3	I've been feeling relaxed					
CS4	I've been feeling interested in other people					
CS5	I've had energy to spare					
CS6	I've been dealing with problems well					
CS7	I've been thinking clearly					
CS8	I've been feeling good about myself					
CS9	I've been feeling close to other people					
CS10	I've been feeling confident					

CS11	I've been able to make up my own mind about things					
CS12	I've been feeling loved					
CS13	I've been interested in new things					
CS14	I've been feeling cheerful					

Annexure D- PHQ9

PATIENT HEALTH QUESTIONNAIRE (PHQ-9)

NAME: _____ DATE: _____

Over the last 2 weeks, how often have you been
bothered by any of the following problems?
(use "✓" to indicate your answer)

	Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling bad about yourself—or that you are a failure or have let yourself or your family down	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed. Or the opposite —being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3
9. Thoughts that you would be better off dead, or of hurting yourself	0	1	2	3

add columns + +

(Healthcare professional: For interpretation of TOTAL, TOTAL:
please refer to accompanying scoring card).

10. If you checked off <i>any problems</i> , how <i>difficult</i> have these problems made it for you to do your work, take care of things at home, or get along with other people?	Not difficult at all	_____
	Somewhat difficult	_____
	Very difficult	_____
	Extremely difficult	_____

Annexure E- CREDI

CAREGIVER REPORTED EARLY DEVELOPMENT INSTRUMENTS (CREDI)

LONG FORM: MOTOR, COGNITIVE, LANGUAGE, & SOCIAL-EMOTIONAL

Date: _____

Child Date of Birth: _____



Interviewee ID: _____










Child Age (in Months): _____

Interviewer Instructions:












- Based on the child's age (in months, or *M*), find the item that corresponds to the child's age-specific start point (marked by → to the left of the items).
- Administer the item that corresponds to this start point, and continue with subsequent items until the caregiver responds "No" to 5 items in a row.
 - *Note:* Items 9 and 102 are reverse coded, indicating that a "No" response on these items counts as a "Yes" and vice versa. These items are marked with ** as a reminder.
- After 5 "No" responses, stop asking the items and move to Mental Health section.
- Remember to show caregivers the corresponding full-page illustration for those items that include an image.
- Before administering items, SAY (to caregivers):

Now I am going to ask you about the types of things your child is currently able to do. Please answer "yes" or "no" to these questions. If you are unsure, you can also answer by saying "don't know." Please keep in mind that children learn and grow at different rates, so it is fine if your child can't yet do these things. Some of these skills children only achieve at older ages. If there is any question you feel uncomfortable answering, please let me know and we can move to the next question.

	Item #	Item	Image	Response		
0-5 M →	LF1	When lying on his/her back, does the child move his/her arms and legs?		Yes	No	DK
	LF2	Does the child bring his/her hand to his/her mouth?		Yes	No	DK
	LF3	Does the child laugh?		Yes	No	DK
	LF4	Does the child smile when others smile at him/her?		Yes	No	DK








6-11 M →	LF5	Does the child sometimes suck his/her thumb or fingers?		Yes	No	DK
	LF6	Does the child grasp onto a small object (e.g., your finger, a spoon) when put in his/her hand?		Yes	No	DK
	LF7	Can the child bring his/her hands together?		Yes	No	DK
	LF8	Does the child recognize you or other family members (e.g., smile when they enter a room or move toward them)?		Yes	No	DK
	LF9	**Does the child hold his/her hands in fists all the time?		Yes	No	DK
12-17 M →	LF10	Does the child show interest in new objects that are put in front of him/her by reaching out for them?		Yes	No	DK
	LF11	Can the child roll from his/her back to stomach, or stomach to back, on his/her own?		Yes	No	DK
	LF12	Does the child show interest in new objects by trying to put them in his/her mouth?		Yes	No	DK
	LF13	Does the child often show affection toward others (e.g., hugging parents, brothers, or sisters)?		Yes	No	DK
	LF14	Can the child pick up a small object (e.g., a small toy or small stone) using just one hand?		Yes	No	DK
	LF15	Does the child look for an object of interest when it is removed from sight or hidden from him/her (e.g., put under a cover, behind another object)?		Yes	No	DK
	LF16	When lying on his/her back, does the child grab his/her feet?		Yes	No	DK
	LF17	Can the child make simple sounds like "ba," "da," or "do?"		Yes	No	DK
	LF18	When lying on his/her stomach, can the child hold his/her head and chest off the ground using only his/her hands and arms for support?		Yes	No	DK
	LF19	Does the child play by tapping an object on the ground or a table?		Yes	No	DK
	LF20	Can the child hold him/herself in a sitting position without help or support for longer than a few seconds?		Yes	No	DK
	LF21	Does the child intentionally move or change his/her position to get objects that are out of reach?		Yes	No	DK
	LF22	Does the child look at an object when someone says "look!" and points to it?		Yes	No	DK
	LF23	Does the child recognize his/her name or nickname? That is, does he/she respond differently to his/her name than to other sounds or words?		Yes	No	DK
	LF24	When you talk to the child, does he/she respond by making a sound (e.g., "ba," "da," or "do") or by saying a word?		Yes	No	DK
	LF25	Can the child crawl, roll, or scoot forward on his/her own?		Yes	No	DK





18-23 M →





LF26	Can the child pick up and eat small pieces of food with his/her fingers?		Yes	No	DK
LF27	Can the child transfer a small object (e.g., a small toy or small stone) from one hand to the other?		Yes	No	DK
LF28	Does the child clap his/her hands together?		Yes	No	DK
LF29	Can the child maintain a standing position while holding on to a person or object (e.g., wall or furniture)?		Yes	No	DK
LF30	Can the child use gestures to indicate what he/she wants (e.g., put arms up to indicate that he/she wants to be held, or point to water)?		Yes	No	DK
LF31	Can the child pick up a small object (e.g., a small toy or small stone) with just his/her thumb and a finger?		Yes	No	DK
LF32	Can the child pick up and drop a small object (e.g., a small toy or small stone) into a bucket or bowl while sitting?		Yes	No	DK
LF33	Can the child throw a small ball or small stone in a forward direction using his/her hand?		Yes	No	DK
LF34	Can the child walk several steps while holding on to a person or object (e.g., wall or furniture)?		Yes	No	DK
LF35	Can the child say one or more words (e.g., names like "Mama" or "ba" for "ball")?		Yes	No	DK
LF36	Can the child maintain a standing position on his/her own, without holding on or receiving support?		Yes	No	DK
LF37	Can the child follow simple directions (e.g., "Stand up" or "Come here")?		Yes	No	DK
LF38	Does the child watch what other children do and try to copy them?		Yes	No	DK
LF39	Can the child sit or play on his/her own for at least 20 minutes?		Yes	No	DK
LF40	Can the child walk several steps on his/her own, without holding on or receiving support?		Yes	No	DK
LF41	Can the child bend down to the ground and stand up again without falling and without holding onto a person or object?		Yes	No	DK
LF42	Does the child ask you for help using signs or words when he/she cannot do something on his/her own (e.g., to reach an object up high)?		Yes	No	DK
LF43	Does the child try to repeat sounds or words said by other people?		Yes	No	DK

24-29 M →

30-35 M →

LF44	Can the child climb onto an object such as a chair or bench?		Yes	No	DK
LF45	Can the child figure out how to turn a spoon or object if you give it to him/her the wrong way around?		Yes	No	DK
LF46	Does the child stop at least briefly when told "no" or "stop that"?		Yes	No	DK
LF47	Can the child kick a ball or other round object forward using his/her foot?		Yes	No	DK
LF48	Can the child point to a person or object when asked (e.g., "Where is mama?" or "Where is the ball?")?		Yes	No	DK
LF49	Can the child drink from a cup (without a lid) on his/her own without spilling?		Yes	No	DK
LF50	Does the child imitate animal or other sounds (e.g., "vroom" for a car, "moo" for a cow)?		Yes	No	DK
LF51	Can the child run more than a few steps without falling or bumping into objects?		Yes	No	DK
LF52	Can the child draw a line or shape on paper with a pen or crayon, or in the dirt with a stick?		Yes	No	DK
LF53	Can the child answer simple questions (e.g., "Do you want water?") by saying "yes" or "no", rather than nodding?		Yes	No	DK
LF54	Can the child stack three or more small objects (e.g., blocks, cups, bottle caps) on top of each other?		Yes	No	DK
LF55	Does the child imitate others' behaviors (e.g., washing hands or dishes)?		Yes	No	DK
LF56	Does the child sometimes share things (e.g., food, toys) with others without being told?		Yes	No	DK
LF57	Can the child follow orders or instructions that have more than one part (e.g., "Go get water and go to bed")?		Yes	No	DK
LF58	Can the child say five or more separate words (e.g., names like "Mama" or objects like "ball")?		Yes	No	DK
LF59	Is the child kind to younger children (e.g., speaks to them nicely and touches them gently)?		Yes	No	DK
LF60	Can the child walk on an uneven surface (e.g., a bumpy or steep road) without falling?		Yes	No	DK
LF61	Does the child listen to someone telling a story with interest?		Yes	No	DK
LF62	Can the child ask for something (e.g., food, water) by name when he/she wants it?		Yes	No	DK
LF63	Does the child involve others in play (i.e., play interactive games with other children)?		Yes	No	DK
LF64	Can the child correctly name at least one family member		Yes	No	DK

	other than mom and dad (e.g., name of brother, sister, aunt, uncle)?				
LF65	Does the child play by pretending objects are something else (e.g., imagining a bottle is a doll, a stone is a car, or a spoon is an airplane)?		Yes	No	DK
LF66	Does the child show sympathy or look concerned when others are hurt or sad?		Yes	No	DK
LF67	Can the child walk backwards?		Yes	No	DK
LF68	Does the child show curiosity to learn new things (e.g., by asking questions or exploring a new area)?		Yes	No	DK
LF69	Can the child feed him/herself using a spoon or other utensil without spilling?		Yes	No	DK
LF70	Can the child concentrate on one task (e.g., playing with friends, eating meal) for 20 minutes?		Yes	No	DK
LF71	Does the child know the names of at least two body parts (e.g., arm, eye, or nose)?		Yes	No	DK
LF72	If you show the child an object he/she knows well (e.g., a cup or animal), can he/she consistently name it?		Yes	No	DK
LF73	Can the child speak using short sentences of two words that go together (e.g., "Mama go" or "Dada eat")?		Yes	No	DK
LF74	Can the child use a tool (e.g., a stick or spoon) to reach objects that are far away?		Yes	No	DK
LF75	Can the child indicate when he/she needs to go to the toilet?		Yes	No	DK
LF76	Can the child say ten or more separate words (e.g., names like "Mama" or objects like "ball")?		Yes	No	DK
LF77	Can the child remove an item of clothing (e.g., take off his/her shirt)?		Yes	No	DK
LF78	Can the child tell you when he/she is tired or hungry?		Yes	No	DK
LF79	Does the child usually finish an activity he/she enjoys (e.g., a game or book)?		Yes	No	DK
LF80	Can the child easily switch back and forth between activities (e.g., go back to a game after being interrupted)?		Yes	No	DK
LF81	Can the child sing a short song or repeat parts of a rhyme from memory by him/herself?		Yes	No	DK
LF82	Can the child jump with both feet leaving the ground?		Yes	No	DK
LF83	Can the child speak using sentences of three or more words that go together (e.g., "I want water" or "The house is big")?		Yes	No	DK
LF84	Can the child whisper?		Yes	No	DK
LF85	Does the child greet neighbors or other people he/she knows without being told (e.g., by saying hello or		Yes	No	DK

	gesturing hello)?				
LF86	Can the child unscrew the lid from a bottle or jar?		Yes	No	DK
LF87	Can the child correctly ask questions using any of the words "what," "which," "where," or "who"?		Yes	No	DK
LF88	Can the child correctly use any of the words "I," "you," "she," or "he" (e.g., "I go to store," or "He eats rice")?		Yes	No	DK
LF89	Does the child pronounce most of his/her words correctly?		Yes	No	DK
LF90	Can the child count up to five objects (e.g., fingers, people)?		Yes	No	DK
LF91	Does the child ask about familiar people other than parents when they are not there (e.g., "Where is the neighbor")?		Yes	No	DK
LF92	If you show the child two objects or people of different size, can he/she tell you which one is the big one and which is the small one?		Yes	No	DK
LF93	Can the child stand on one foot for several seconds without holding on to a person or object (e.g., wall or furniture)?		Yes	No	DK
LF94	Can the child identify at least one color (e.g., red, blue, yellow)?		Yes	No	DK
LF95	Does the child regularly use describing words such as "fast," "short," "hot," "fat," or "beautiful" correctly?		Yes	No	DK
LF96	If you point to an object, can the child correctly use the words "on," "in," or "under" to describe where it is (e.g., "The cup is on the table" instead of "The cup is in the table.")		Yes	No	DK
LF97	Can the child explain in words what common objects like a cup or chair are used for?		Yes	No	DK
LF98	Can the child dress him/herself (e.g., put on his/her pants and shirt without help)?		Yes	No	DK
LF99	Does the child ask "why" questions (e.g., "Why are you tall")?		Yes	No	DK
LF100	If you ask the child to give you three objects (e.g., stones, beans), does the child give you the correct amount?		Yes	No	DK
LF101	Does the child usually put objects or toys back where they belong after using them?		Yes	No	DK
LF102	**Does the child frequently act impulsively or without thinking (e.g., running into the street without looking)?		Yes	No	DK
LF103	Does the child sometimes save things like candy or new toys for the future?		Yes	No	DK
LF104	Can the child say what others like or dislike (e.g., "Mama doesn't like fruit," "Papa likes football")?		Yes	No	DK
LF105	Can the child fasten and unfasten buttons without help?		Yes	No	DK
LF106	Can the child talk about things that will happen in the		Yes	No	DK

	future using correct language (e.g., "Tomorrow he will attend school" or "Next week we will go to the market")?				
LF107	Can the child talk about things that have happened in the past using correct language (e.g., "Yesterday I played with my friend" or "Last week she went to the market")?		Yes	No	DK
LF108	Does the child know the names of any letters (e.g., A, B, C)?		Yes	No	DK

LONG FORM: MENTAL HEALTH

Interviewer Instructions:

- Administer all items for all children, regardless of age.
- Before administering items, SAY (to caregivers):

We have just a few more questions to answer. The rules for these are the same. Please continue to answer with "yes", "no," or "don't know."

Item #	Item	Response		
LMH1	Does the child often cry for no reason (e.g., when he/she is not hungry or tired)?	Yes	No	DK
LMH2	Does the child frequently complain of headaches or stomachaches when he/she is not physically ill?	Yes	No	DK
LMH3	Does the child become upset when you are not with him/her?	Yes	No	DK
LMH4	Does the child become very shy, afraid, or upset around strangers, even when you're with him/her?	Yes	No	DK
LMH5	Does the child cling excessively to his/her caregiver, even in a safe setting?	Yes	No	DK
LMH6	Can the child sit still when asked to by an adult (e.g., for two minutes)?	Yes	No	DK
LMH7	Does the child cry or whine when he/she is made to wait for something he/she wants (e.g., toy or food)?	Yes	No	DK
LMH8	Does the child often kick, bite, or hit other children or adults?	Yes	No	DK
LMH9	Does the child become extremely withdrawn or shy in new situations?	Yes	No	DK

FOCUS GROUP DISCUSSION INTERVIEW GUIDE

Participants with attendance >80%

1. Why did you decide to participate in the Go Baby Go program?
2. When you signed up for the program what did you think it was about?
3. Can you tell me a little bit about the sessions you found very useful?
4. Were there any areas/topics that were new to you?
5. Were there any topics that were difficult to grasp? And what were they?
6. What are your suggestions to make these topics more understandable?
7. What are your thoughts about the GBG sessions?
8. Did you have any barriers to participating in the sessions? What were the barriers participation?
9. How many of you had home visits? How do you feel about these home visits?
10. Do you feel these sessions would be useful for father and why?
11. Were you able to pass this knowledge to the rest of the family? How were their reactions to the program?
12. What else would you think should be included in the program that would be useful for a caregiver of a child between 0-3 years?
13. Do you have any other suggestions to improve the sessions?
14. Even after the group sessions, would you like to meet once in a while?

15. In addition to the above, do you have anything else to say?

Participants with attendance between 25% and 80%

1. Why did you decide to participate in the Go Baby Go program?
2. When you signed up for the program what did you think it was about?
3. Can you tell me a little bit about the sessions you found very useful?
4. Were there any areas/topics that were new to you?
5. Were there any topics that were difficult to grasp? And what were they?
6. What are your suggestions to make these topics more understandable?
7. What are your thoughts about the GBG sessions?
8. Did you have any barriers to participating in the sessions? What were the barriers participation?
9. We understand that you could not attend all the sessions. What were the reasons for not participating?
10. How many of you had home visits? How do you feel about these home visits?
11. Do you feel this session would be useful for father and why?
12. Were you able to pass this knowledge to the rest of the family? How were their reactions to the program?
13. What else would you think should be included in the program that would be useful for a caregiver of a child between 0-3 years?

14. Do you have any other suggestions to improve the sessions?
15. Even after the group sessions, would you like to meet once in a while?
16. In addition to the above, do you have anything else to say?

Participants with attendance <25%

1. When you signed up for the program what did you think it was about?
2. We understand that you could not attend in the sessions. What were the reasons for not participating?
3. What are the possible benefits that you may through a program like this?
4. What are the barriers to participating in the program?
5. Do you have any suggestions to improve the program that makes it easier for more people to participate?

GBG Facilitators

1. What your thoughts about the participation of the caregivers in this program?
2. Did you experience any barriers/difficulties when engaging the participants in the program? Can you tell us a little bit more about that?
3. Can you tell us a little bit about the barrier/difficulties you faced when contributing to this program?

4. What are unanticipated issues you encountered in the delivery and uptake of the program?
5. Do you have suggestions to improve the program further?
6. What are your thoughts on cultural appropriateness/adaptation of GBG programme? Do you have any suggestions to make the programme better suited for Sri Lankan context?

KEY INFORMANT INTERVIEWS

Mentors (WVL)

1. What do you think about this program?
2. What are the difficulties you faced when managing this program?
3. Do you have any suggestions to make this program to make this program more manageable or effective?
4. Are there any topics that could be adapted/changed for your community?
5. What are your thought on the amount of knowledge given to the participants?