

Social and Behavior Change Communication to Improve Infant and Young Child Feeding Practices in Ethiopia

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Background

- Improving key positive → change at the individual, household, and community levels.
- SBCC messages from Growth through Nutrition → via communication materials & CCs
- Consistent, locally adapted, actionable messages which were reinforced at each level in hopes of significant improvements in the short term and sustainable progress in the long term
- In addition to the existing SBCC approach → Virtual Facilitator to complement the ECCs.
- VF facilitate the peer group activities, which consist of listening to nutrition-related information, discussing nutrition-related information and experiences, singing nutrition songs, demonstrations, skills-building games, and role play

Objective

- Investigating the added value of a new SBCC tool (virtual facilitator) that has been added to the existing ECC approach to enhance effects of SBCC within the Growth through Nutrition in improving infant and young child feeding practices.

Methods

- **Setting:** Three Woredas (Baso Liben, Becho and Girar Jarso)
- **Design:** quasi-experimental design with a control group
- **Intervention:** ECC components supplemented with audio-recorded Virtual Facilitator sessions designed to complement the monthly meeting lesson or topic. The VF audio recordings are played on a cell phone or audio player and are designed to be turned off by the facilitator when he/she hears a bell that signals the time to stop listening and start the group activity.

Methods

- **Control:** received monthly ECC meetings led by a facilitator for a group of 10-15 participants & take-home materials with behaviors or activities to discuss and try at home level within the family and monitored and supervised during home visits scheduled by CCAs.
- **Sample size:** Two kebeles from each Woreda (a total of six kebees)
414 households (207 in Intervention & 207 in Control groups)
- **Participants:** Pregnant and/or lactating women who were Growth through Nutrition beneficiaries
- **Sampling:** Pre-selected from a beneficiary list based on their enrolment in the ECC groups.
- The participants assignment was evenly distributed across the selected kebeles, with each participant assigned to an intervention group based on the assignment of their kebele of residence.

Methods

- **Outcomes:** Minimum Diet Diversity, Minimum Meal Frequency, Minimum Acceptable Diet, Minimum Diet Diversity for Women, WASH practices, decision making...
- **Data Collection & Analysis plan:** 2 rounds of data collection (baseline & follow up)
 - Significant differences within the groups → chi-square test
 - changes between groups (intervention vs control) from baseline to follow-up → difference in difference analysis
 - Coefficients determined from the interaction between the grouping variable and time variable

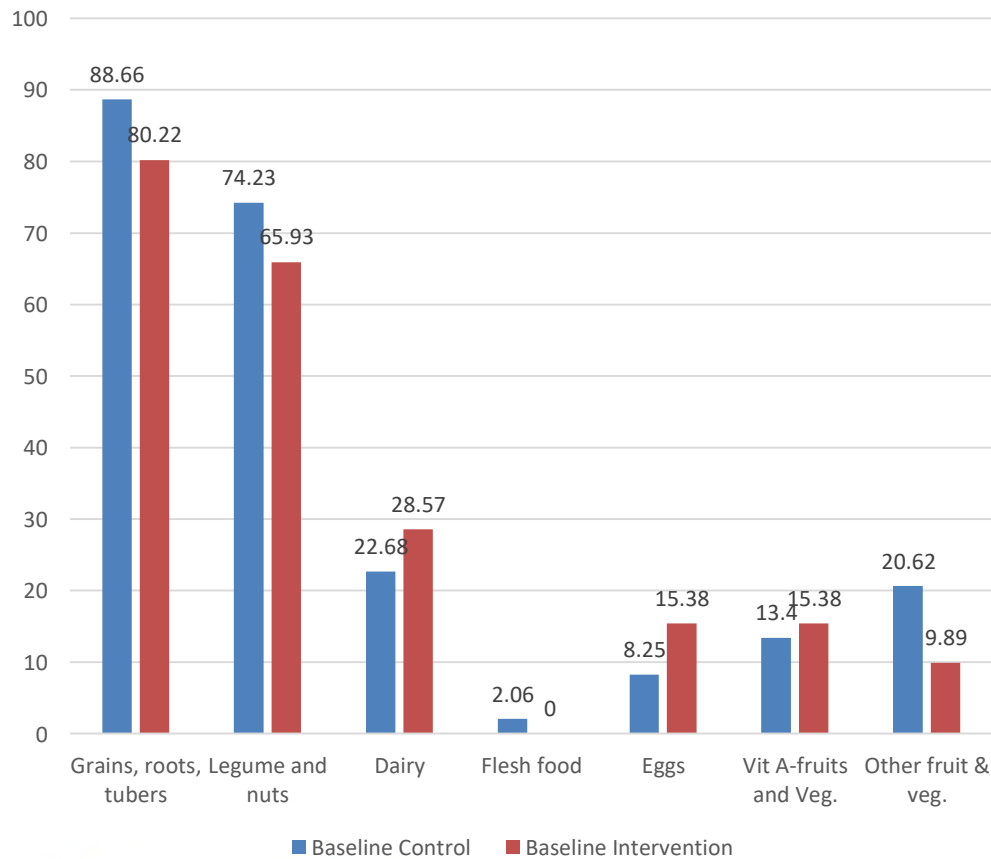
Results: Infant and young child feeding (IYCF) practices

Variable		Baseline		P-value	Follow up		p-value
		Control n(%)	Intervention n(%)		Control n(%)	Intervention n(%)	
Throw away the first milk	Yes	78 (55)	64 (45)	0.095	103(53)	97(56)	0.474
	No	63 (45)	77 (55)		90(47)	74(43)	
Initiation of breastfeeding	Immediately	96 (69)	98 (70.00)	0.168	129(67)	129(75)	0.118
	1 to 24 Hrs	37 (27)	29 (21)		51(27)	38(22)	
	24+ Hrs	6 (4)	13 (9)		11(6)	4(2)	
Taken other than breast milk in 6 months	Yes	86 (60)	82(58)	0.503	81 (42)	68 (40)	0.130
	No	56 (40)	59(42)		111 (58)	103 (60)	
Timely initiation of comp. food	Yes	77(80)	72 (95)	0.065	169(93)	154(96)	0.042*
	No	9 (11)	4 (5)		13 (12)	4(3)	
Minimum dietary diversity	Low	88(90)	79 (88)	0.661	125(69)	100(63)	0.243
	Appropriate	10(10)	11 (12)		57(31)	60(38)	
Minimum meal frequency (MMF)	Yes	47(48)	39 (43)	0.525	148(88)	131(84)	0.288
	No	51(52)	51 (57)		20(12)	25(16)	
Minimum acceptable diet(MAD)	Yes	6 (6)	5 (6)	0.869	53(27)	51(27)	0.529
	No	92(94)	85 (94)		129(66)	107(56)	
Bottle feeding	Yes	15(17)	8 (11)	0.219	21(12)	32(20)	0.027*
	No	72(83)	68 (89)		161(89)	128(80)	

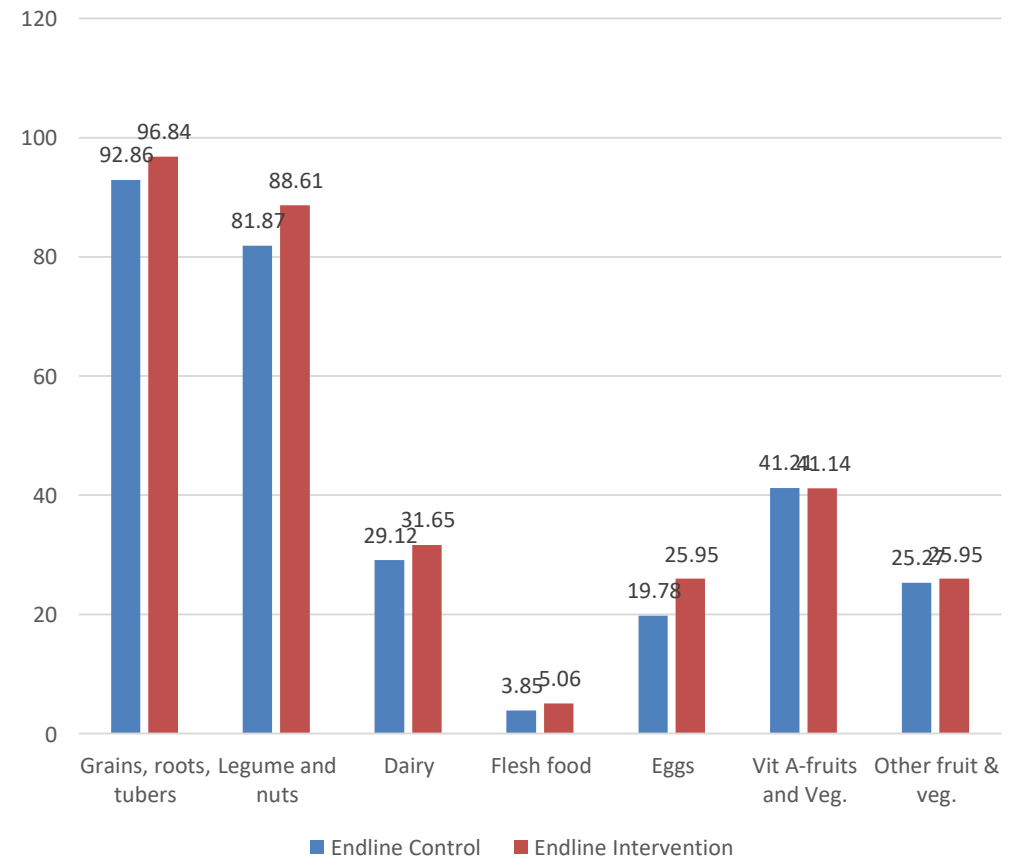


Results: Pattern of food groups consumption

Pattern of food groups consumed by children 6-23 mos at baseline



Pattern of food groups consumed by children from 6-23 mons at the endline





Results: Maternal Dietary Practices

Variable		Baseline		p-value	Follow up		p-value
		Control n (%)	Intervention n(%)		Control n(%)	Intervention n(%)	
While breastfeeding you eat	More	35 (41)	32 (43)	0.429	102(56)	93(58)	0.030*
	Same	40 (47)	38 (51)		61(34)	62(39)	
	Less	11 (13)	5 (7)		19(11)	5(3)	
Minimum Dietary Diversity for Women (MDD-W)	Low (<5)	158 (77)	160 (78)	0.813	136 (69)	118 (62)	0.151
	Appropriate (≥5)	47 (23)	45 (22)		61 (31)	72 (38)	

Results: Water, Sanitation & Hygiene Practices of Participants

Variable		Baseline		Endline		p-value
		Control	Intervention	Control	Intervention	
Circumstances where the respondents washed hands	Not at all	58 (28.29)	49 (23.90)	0(0.00)	0(0.00)	-
	When dirt is visible	136(66.34)	120 (58.54)	148(74.75)	143(74.48)	0.198
	After toilet	92 (44.88)	89 (43.41)	115(58.08)	132(68.75)	0.024*
	After eating	149 (72.68)	116 (56.59)	142(71.72)	144(75.00)	0.033*
	before feeding a child	66 (32.20)	68 (33.17)	91(45.96)	114(59.38)	0.047*
Materials used to wash hands	Water only	43 (29.25)	69 (44.23)	69(34.85)	59(30.73)	0.431
	Water and soap	103 (70.07)	86 (55.13)	125(63.13)	132(68.75)	
	Water and ash	1(0.68)	1 (0.64)	5(2.03)	1(0.52)	
Handwashing facility	Yes	118 (57.56)	91 (44.39)	131(66.16)	128(66.67)	0.047*
	No	87 (42.44)	114 (55.61)	67(33.84)	64(33.33)	
Presence of soap or ash	Yes	32 (28.32)	20 (22.22)	38(29.01)	42(32.81)	0.515
	No	81 (71.68)	70 (77.78)	92(70.23)	86(67.19)	
Separate room for livestock	Yes	60 (30.46)	96 (48.48)	94(47.47)	95(49.48)	0.015*
	No	137 (69.54)	102 (51.52)	97(48.99)	91(47.40)	

Results: Estimates from the Difference in Difference analysis

Outcome	β Coefficient	β Coefficient (%)	Robust error	Stand. 95% CI	p-value
Minimum dietary diversity (appropriate)	0.20	20%	0.17	(-14%, 54%)	0.248
Minimum meal frequency (Yes)	0.02	2%	0.14	(-27%, 30%)	0.912
Minimum acceptable diet (Yes)	0.18	18%	0.17	(-16%, 53%)	0.295
Women dietary diversity	0.08	8%	0.06	(-4.5%, 20.3%)	0.213
Antenatal (ANC) follow-up (Yes)	0.013	1.3%	0.04	(-11%, 9%)	0.812
Iron and folic acid (IFA) intake (Yes)	0.034	3.4%	0.05	(-7%, 14%)	0.545
Duration of IFA intake (3 months and more)	0.14	14%	0.08	(-22%, 49%)	0.045*

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Minimum meal frequency (Yes)	2%	0.14		(-27%, 30%)	0.912
Minimum acceptable diet (Yes)	18%	0.17		(-16%, 53%)	0.295
Women dietary diversity	7.9%	0.06		(-4.5%, 20.3%)	0.213
ANC follow-up (Yes)	1.3%	0.04		(-11%, 9%)	0.812
IFA intake (Yes)	3.4%	0.05		(-7%, 14%)	0.545
Duration of IFA intake (3 months and more)	13.6%	0.08		(-22%, 49%)	0.045*
Hand washing facility (Yes)	14.3%	0.06		(-20%, 48%)	0.038*
Hand washing material (water + soap/ash)	9.7%	0.16		(-32%, 52%)	0.047*
Separate space for livestock (Yes)	14.5%	0.12		(-47%, 17%)	0.036*
Decision to make major purchase (Jointly)	2.5%	0.06		(-11%, 16%)	0.719
Decision on husband's income (Jointly)	3.6%	0.07		(-9.7%, 17%)	0.596
Raising small animals (Jointly)	6.1%	0.07		(-7.4%, 19.5%)	0.375
Decision on use of animals (Jointly)	2.8%	0.06		(-10%, 15.6%)	0.668
Decision on use of agri. Products (Jointly)	12.3%	0.06		(-0.4%, 25%)	0.048*
Workload/Time allocation (Yes decreased)	8.4%	0.07		(-5.3%, 22.2%)	0.232
Discussed about nutrition (Yes)	5.2%	0.06		(-7.8%, 18.3%)	0.432
Initiating the discussion (Self)	5.7%	0.07		(-8.3%, 19.7%)	0.424
Need approval for diversified consumption (Yes)	-6.3%	0.06		(-19%, 6.4%)	0.334

Summary

- Both the intervention and control groups changed positively from baseline to endline for a range of indicators.
- Improvements in child diet diversity and minimum acceptable diet were seen in both control and intervention groups from the baseline values.
- Improvements in hand washing practices from baseline to endline.
- Improvements in exclusively breastfeeding, though significant number still feed their infants other than breast milk in the first six months.
- Positive changes in the consumption of legumes and nuts, dairy, eggs and vitamin A rich fruits and vegetables from the baseline values.

Summary

- Change attributed to the use of virtual facilitator and were statistically significant.
 - IFA intake for three months and above,
 - Having hand washing facility in the household,
 - Hand washing with water and soap/ash
 - Having separate space for livestock
 - Joint decision making on the use of agricultural products
- Changes attributed to the use of VF and were not statistically significant/but practically important
 - Minimum Dietary Diversity
 - Minimum Acceptable Diet
 - Minimum diet Diversity for Women

Lessons Learned

- Consider the magnitude of these changes beyond their statistical significance
- Strengthen the use of VF to transmit standard nutrition messages for a positive change mainly in WASH and IYCF indicators.
- Important to tailor the use of virtual facilitators with a focus on the indicators they positively affect more.
- Strengthen the use of multiple SBCC strategies in sustaining the positive changes
- Improve SBCC implementation to address disparities in some WASH, exclusive breast feeding, HH decision making, women diet diversity
- Continuous monitoring and evaluation of the ECC implementation to ensure compliance of intervention administration in order to harness its maximum benefit



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