A Mother's Voice:
Impacts of Spousal Communication Training on Child Health Investments

Online Appendix

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February 17, 2024

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Appendix A: Additional Tables and Figures

Table A1: Balance Checks.

	Control		WCommHN		WHN		MHN		WCommHN - WHN	N
	Mean	SD	Coeff.	SE	Coeff.	SE	Coeff.	SE	p-value	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Woman's age	27.635	6.523	0.120	(0.268)	0.383	(0.261)	0.028	(0.257)	0.283	5505
Woman's years of education	5.200	3.000	0.091	(0.156)	-0.075	(0.152)	-0.036	(0.156)	0.273	5339
Number of children under 5 years old	1.640	0.692	-0.002	(0.029)	0.015	(0.028)	-0.012	(0.029)	0.533	5332
Woman earns income	0.796	0.403	-0.019	(0.022)	-0.016	(0.021)	0.007	(0.020)	0.910	5467
Wife part of household decisions ASTE (Woman)	0.000	1.000	-0.068	(0.052)	-0.058	(0.054)	-0.003	(0.055)	0.856	5507
Couple makes decisions together ASTE (Woman)	0.000	1.000	-0.046	(0.053)	-0.050	(0.055)	0.035	(0.056)	0.948	5507
Husband's violent behavior ASTE	0.000	1.000	0.009	(0.042)	0.035	(0.038)	0.042	(0.040)	0.523	5505
Woman's Overall Discussion ASTE	0.000	1.000	-0.017	(0.042)	0.026	(0.040)	0.037	(0.037)	0.287	5511
Woman's Health Knowledge ASTE	0.152	0.952	-0.022	(0.045)	0.018	(0.044)	-0.062	(0.046)	0.341	5511
Man's Health Knowledge ASTE	-0.158	1.024	-0.032	(0.047)	0.038	(0.047)	-0.012	(0.049)	0.098	5373
Household Sanitary Practices ASTE	0.000	1.000	0.038	(0.054)	0.055	(0.053)	-0.008	(0.056)	0.756	5512
Newborn Health ASTE	0.000	1.000	0.033	(0.045)	-0.050	(0.050)	-0.024	(0.050)	0.080	4967
Maternal Health ASTE	0.000	1.000	-0.035	(0.045)	0.003	(0.040)	0.005	(0.043)	0.365	5381
Carbohydrates ASTE	0.000	1.000	-0.006	(0.048)	-0.069	(0.050)	-0.080*	(0.048)	0.202	5510
Animal-sourced foods ASTE	0.000	1.000	0.066	(0.053)	0.026	(0.044)	0.026	(0.049)	0.445	5510
Fruit and vegetables ASTE	0.000	1.000	-0.037	(0.046)	-0.039	(0.046)	-0.154***	(0.047)	0.975	5510
Spending on rice per capita, last 7 days (UGX)	5.823	17.233	1.145	(0.823)	0.752	(0.840)	1.314	(0.855)	0.663	5505
Spending on meat/fish per capita, last 7 days (UGX)	584.026	1202.445	57.544	(59.499)	47.676	(53.733)	86.370	(53.155)	0.870	5505
Birthweight of last-born baby (KG)	3.335	0.553	0.015	(0.053)	-0.047	(0.052)	0.026	(0.051)	0.236	5467
Child's weight-for-age Z-score	-0.260	1.295	-0.004	(0.059)	0.039	(0.056)	0.003	(0.057)	0.430	5721
Child's height-for-age Z-score	-1.395	1.792	0.000	(0.101)	0.032	(0.097)	-0.069	(0.099)	0.745	5721
Child's MUAC-for-age Z-score	-0.019	1.066	0.001	(0.066)	-0.034	(0.061)	0.062	(0.061)	0.583	5721
Child's hemoglobin level (g/dl)	11.291	1.424	-0.088	(0.069)	-0.007	(0.069)	-0.065	(0.068)	0.254	5721
P-value of joint F-test			0.923		0.722		0.223		0.524	

Note: * p<0.1, ** p<0.05, *** p<0.01. Columns (1) and (2) show the summary statistics for the control group at baseline. Columns (3), (5) and (7) display the coefficient estimates from regressing the baseline variable on three treatment dummies (taking value 1 if the respondent was randomly assigned to the WCommHN, WHN, or MHN group, respectively). Standard errors clustered at the village level are reported in columns (4), (6) and (8). All specifications control for stratum and district fixed effects. The last row of the table reports the p-values of different joint significance tests. In columns (3), (5), and (7), the null hypothesis is that the coefficient of the treatment dummy (WCommHN, WHN, and MHN, respectively) is 0 for all outcomes. In column (9), the null hypothesis is that the coefficient of the WCommHN dummy is equal to that of the WHN dummy in all regressions. Column (9) reports the p-values of the test of the null hypothesis of equal effects of the WHN and WCommHN treatment arms for each outcome separately. Column (10) displays the number of non-missing household or child-level (for the anthropometric outcomes in the last four rows) observations in the baseline survey out of a sample of 5512 households. Most outcomes capture baseline characteristics of the female respondent in the household, except for the following: Man's Health Knowledge ASTE, where the sample is the number of male partners present at the time of the baseline interview; Newborn Health ASTE and Maternal Health ASTE, where the sample is restricted to women who gave birth in the last two years or are currently pregnant; Child's anthropometrics and hemoglobin levels, for which the sample is all children aged 0-28 months at baseline. "Birthweight of last-born baby" applies to women who had a live birth in the two years preceding the baseline survey. We trim the top 5% of values of this outcome (all of which are > 5KG), as we do for the endline version of this variable in Table 5. We impute all missing values of this outcome with the sample mean and control for a dummy variable equal to 1 if the value was imputed. All ASTEs are the baseline counterparts to the endline ASTEs in Tables 1-4.

Table A2a: Sample attrition by treatment arm.

	Still in sample	
	Woman (1)	Child anthropometrics (2)
WCommHN	0.004 [0.008]	-0.002 [0.010]
WHN	0.007 [0.007]	0.003 [0.009]
MHN	-0.003 [0.008]	-0.003 [0.009]
Control mean of outcome	0.964 (0.185)	0.948 (0.223)
p-value: WCommHN=WHN	0.733	0.581
p-value: WCommHN=MHN	0.371	0.942
p-value: WHN=MHN	0.184	0.493
Observations	5,512	5,512

Note: * $p<0.1$, ** $p<0.05$, *** $p<0.01$. Standard errors clustered at the village level in brackets. The outcome is a binary variable equal to 1 if the baseline household was surveyed in the endline in column (1) and whether child anthropometric measurements were collected at endline in column (2). We report the Control group standard deviation of the outcome variable underneath the Control mean in parentheses. The p-values reported below the Control mean show the results of the test of the null hypothesis of equal effects between the different intervention arms. All specifications control for stratum and district fixed effects.

Table A2b: Heterogeneity of attrition from the endline survey by baseline characteristics.

	Still in sample: Woman						Still in sample: Child anthropometrics					
	WCommHN vs. WHN		WHN vs. Control		WCommHN vs. Control		WCommHN vs. WHN		WHN vs. Control		WCommHN vs. Control	
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)	(12)
WCommHN	-0.003 [0.007]	0.106 [0.104]			0.004 [0.008]	0.052 [0.112]	-0.006 [0.010]	0.046 [0.119]			-0.002 [0.010]	-0.047 [0.117]
WHN			0.007 [0.007]	-0.056 [0.104]					0.003 [0.009]	-0.098 [0.116]		
Treatment arm interacted with:												
Woman's age		-0.001 [0.001]		-0.001 [0.001]		-0.002 [0.001]		0.001 [0.002]		-0.001 [0.002]		-0.001 [0.002]
Woman's years of education		-0.006** [0.003]		0.003 [0.003]		-0.003 [0.003]		-0.004 [0.003]		0.002 [0.004]		-0.002 [0.004]
Number of children under 5 years old		0.008 [0.011]		0.007 [0.012]		0.015 [0.013]		0.006 [0.012]		0.011 [0.014]		0.018 [0.015]
Woman earns income		0.028 [0.019]		-0.006 [0.020]		0.021 [0.024]		0.007 [0.023]		0.002 [0.024]		0.006 [0.027]
Woman part of HH decisions ASTE		0.003 [0.009]		0.006 [0.011]		0.010 [0.012]		0.001 [0.013]		0.013 [0.014]		0.016 [0.016]
Couple makes decisions together ASTE		0.002 [0.010]		-0.011 [0.011]		-0.009 [0.011]		0.007 [0.013]		-0.010 [0.013]		-0.004 [0.012]
Husband's violent behavior ASTE		0.016** [0.008]		-0.004 [0.008]		0.013 [0.009]		0.021* [0.011]		-0.004 [0.009]		0.018 [0.011]
Woman's overall discussion ASTE		0.004 [0.009]		-0.009 [0.008]		-0.004 [0.009]		0.003 [0.010]		-0.013 [0.009]		-0.009 [0.010]
Woman's knowledge index ASTE		0.007 [0.009]		0.004 [0.009]		0.010 [0.007]		0.008 [0.010]		-0.001 [0.010]		0.006 [0.009]
Man's knowledge index ASTE		-0.013 [0.008]		0.015 [0.009]		0.001 [0.008]		-0.019* [0.010]		0.016 [0.010]		-0.005 [0.010]
Household Sanitary Practices ASTE		-0.014* [0.007]		0.000 [0.008]		-0.013 [0.008]		-0.011 [0.011]		0.003 [0.009]		-0.007 [0.011]
Newborn Health ASTE		0.003 [0.006]		0.003 [0.006]		0.007 [0.008]		0.005 [0.008]		-0.010 [0.012]		-0.003 [0.013]
Maternal Health ASTE		-0.002 [0.007]		-0.017* [0.010]		-0.019* [0.010]		0.009 [0.009]		-0.024** [0.011]		-0.016 [0.012]
Carbohydrates ASTE		-0.009 [0.008]		-0.005 [0.008]		-0.014* [0.008]		-0.012 [0.010]		-0.002 [0.009]		-0.015 [0.010]
Animal-sourced foods ASTE		0.017** [0.008]		-0.016* [0.009]		0.001 [0.007]		0.014 [0.009]		-0.017* [0.010]		-0.002 [0.009]
Fruit and vegetables ASTE		0.009 [0.008]		-0.002 [0.008]		0.007 [0.009]		0.002 [0.009]		-0.000 [0.009]		0.001 [0.010]
Birthweight of last-born baby (KG)		0.003 [0.013]		0.009 [0.013]		0.012 [0.014]		0.000 [0.015]		0.022 [0.016]		0.023 [0.017]
Average child's weight-for-age Z-score		0.004 [0.011]		0.015 [0.010]		0.019 [0.013]		-0.006 [0.013]		0.020* [0.012]		0.015 [0.015]
Average child's height-for-age Z-score		-0.004 [0.007]		-0.003 [0.007]		-0.008 [0.008]		-0.005 [0.009]		-0.004 [0.007]		-0.010 [0.009]
Average child's MUAC-for-age Z-score		0.009 [0.009]		-0.029*** [0.011]		-0.019 [0.012]		0.021* [0.011]		-0.029** [0.011]		-0.006 [0.014]
Average child's hemoglobin level (g/dl)		-0.009* [0.005]		0.002 [0.005]		-0.007 [0.006]		-0.007 [0.006]		0.002 [0.006]		-0.004 [0.007]
Outcome mean, omitted group	0.964	0.969	0.957	0.961	0.957	0.961	0.948	0.956	0.944	0.947	0.944	0.947
p-value: joint test		0.295		0.302		0.492		0.446		0.034		0.615
Observations	2,765	2,257	2,814	2,297	2,709	2,164	2,765	2,257	2,814	2,297	2,709	2,164

Note: * p<0.1, ** p<0.05, *** p<0.01. Standard errors clustered at the village level in brackets. This table reports the results of pairwise comparison tests of differential attrition. The odd columns report the results of regressing an outcome equal to 1 if the baseline household was surveyed at endline on the relevant treatment arm dummy (as in Appendix Table A2a but restricting the sample to the pair of treatment/control arms listed in the column headers). In the even columns we also interact the relevant treatment dummy (i.e. WCommHN in columns (2), (6), (8) and (12) and WHN in columns (4) and (10)) with the same list of baseline outcomes as the one used for the balance checks in Table A1. The p-value at the bottom of the table reports the result of the test of the null hypothesis that all interaction term coefficients are 0 in each pairwise specification. All specifications control for stratum and district fixed effects, as well as the main term of all baseline outcomes in the interactions. Since we impute all missing values of the "Birthweight of last-born baby" variable with the sample mean of this outcome, we also control for a dummy variable equal to 1 (main term + interaction) if the value was imputed.

Table A3a: Program impacts on effective communication between spouses: Lee bounds.

	Relationship improved ASTE (1)	Wife part of household decisions ASTE (2)	Couple makes decisions together ASTE (3)	Husband is less violent ASTE (4)
	WCommHN vs. Control			
WCommHN (Lower bound)	0.207***	0.103**	0.133***	0.069*
	[0.045]	[0.043]	[0.048]	[0.037]
WCommHN (Upper bound)	0.211***	0.120***	0.149***	0.073**
	[0.045]	[0.042]	[0.048]	[0.036]
WCommHN missing rate	0.062	0.039	0.039	0.060
Control missing rate	0.064	0.043	0.043	0.061
	WCommHN vs. WHN			
WCommHN (Lower bound)	0.156***	0.046	0.111**	-0.040
	[0.045]	[0.041]	[0.045]	[0.031]
WCommHN (Upper bound)	0.192***	0.061	0.125***	0.004
	[0.044]	[0.042]	[0.044]	[0.033]
WCommHN missing rate	0.062	0.039	0.039	0.060
WHN missing rate	0.051	0.036	0.036	0.049

Note: * p<0.1, ** p<0.05, *** p<0.01. Standard errors clustered at the village level in brackets. The outcomes and specifications used to produce these estimates are the same as those presented in Table 1. The Lee bounds reported in the top panel correspond to the estimate of WCommHN treatment effects with respect to the Control group. The Lee bounds reported in the bottom panel correspond to the estimate of WCommHN treatment effects with respect to the WHN group.

Table A3b: Program impacts on frequency of spousal discussion about targeted health topics and women's and men's health knowledge: Lee bounds.

	Discusses family planning with spouse (1)	Discusses HIV with spouse (2)	Health and nutrition discussion ASTE (3)	Discusses HH finance with spouse (4)	Overall discussion ASTE (5)	Health Knowledge ASTE (Woman) (6)	Health Knowledge ASTE (Man) (7)
	WCommHN vs. Control						
WCommHN (Lower bound)	0.034***	0.056**	0.146***	0.069***	0.199***	0.398***	-0.005
	[0.010]	[0.024]	[0.044]	[0.020]	[0.042]	[0.042]	[0.040]
WCommHN (Upper bound)	0.035***	0.057**	0.148***	0.070***	0.202***	0.417***	0.058
	[0.010]	[0.024]	[0.044]	[0.021]	[0.043]	[0.042]	[0.041]
WCommHN missing rate	0.064	0.060	0.060	0.060	0.060	0.039	0.055
Control missing rate	0.065	0.061	0.061	0.061	0.061	0.043	0.066
	WCommHN vs. WHN						
WCommHN (Lower bound)	-0.005	0.020	0.028	0.049**	0.056	0.042	-0.051
	[0.009]	[0.021]	[0.043]	[0.019]	[0.038]	[0.040]	[0.041]
WCommHN (Upper bound)	0.009	0.033	0.060	0.060***	0.098***	0.063	-0.014
	[0.009]	[0.021]	[0.043]	[0.019]	[0.037]	[0.040]	[0.042]
WCommHN missing rate	0.064	0.060	0.060	0.060	0.060	0.039	0.055
WHN missing rate	0.051	0.048	0.048	0.048	0.048	0.036	0.049

Note: * p<0.1, ** p<0.05, *** p<0.01. Standard errors clustered at the village level in brackets. The outcomes and specifications used to produce these estimates are the same as those presented in Table 2. The Lee bounds reported in the top panel correspond to the estimate of WCommHN treatment effects with respect to the Control group. The Lee bounds reported in the bottom panel correspond to the estimate of WCommHN treatment effects with respect to the WHN group.

Table A3c: Program impacts on household health behaviors: Lee bounds.

	Newborn health ASTE	Maternal health ASTE	Sanitary practices ASTE	Overall health ASTE
	(1)	(2)	(3)	(4)
	WCommHN vs. Control			
WCommHN (Lower bound)	0.080***	0.089*	0.317***	0.355***
	[0.030]	[0.046]	[0.045]	[0.044]
WCommHN (Upper bound)	0.204***	0.146***	0.362***	0.410***
	[0.047]	[0.047]	[0.046]	[0.046]
WCommHN missing rate	0.389	0.311	0.018	0.018
Control missing rate	0.374	0.302	0.028	0.028
	WCommHN vs. WHN			
WCommHN (Lower bound)	-0.041	-0.067	0.057	0.059
	[0.031]	[0.047]	[0.046]	[0.045]
WCommHN (Upper bound)	0.017	-0.012	0.060	0.063
	[0.034]	[0.049]	[0.046]	[0.045]
WCommHN missing rate	0.389	0.311	0.018	0.018
WHN missing rate	0.380	0.302	0.017	0.017

Note: * p<0.1, ** p<0.05, *** p<0.01. Standard errors clustered at the village level in brackets. The outcomes and specifications used to produce these estimates are the same as those presented in Table 3. The Lee bounds reported in the top panel correspond to the estimate of WCommHN treatment effects with respect to the Control group. The Lee bounds reported in the bottom panel correspond to the estimate of WCommHN treatment effects with respect to the WHN group.

Table A3d: Program impacts on women's and children's nutrition: Lee bounds.

	(1)	(2)	(3)
	Panel A: Food Intake (Women and Children)		
	Carbohydrates ASTE	Animal-sourced foods ASTE	Fruit and veg ASTE
	WCommHN vs. Control		
WCommHN (Lower bound)	0.138***	0.104**	0.162***
	[0.046]	[0.047]	[0.047]
WCommHN (Upper bound)	0.153***	0.133***	0.175***
	[0.046]	[0.050]	[0.046]
WCommHN missing rate	0.039	0.039	0.039
Control missing rate	0.043	0.043	0.043
	WCommHN vs. WHN		
WCommHN (Lower bound)	0.018	0.149***	-0.005
	[0.044]	[0.048]	[0.043]
WCommHN (Upper bound)	0.031	0.176***	0.008
	[0.043]	[0.047]	[0.043]
WCommHN missing rate	0.039	0.039	0.039
WHN missing rate	0.036	0.036	0.036
	Panel B: Food Expenditure and Crop Allocation		
	Rice exp pc	Meat/fish exp pc	Grows more fruit/veg
	WCommHN vs. Control		
WCommHN (Lower bound)	28.412*	146.041**	0.072***
	[16.988]	[64.909]	[0.017]
WCommHN (Upper bound)	62.674***	272.485***	0.076***
	[18.871]	[71.738]	[0.017]
WCommHN missing rate	0.083	0.086	0.047
Control missing rate	0.099	0.105	0.043
	WCommHN vs. WHN		
WCommHN (Lower bound)	19.295	197.852***	-0.043**
	[19.414]	[71.060]	[0.018]
WCommHN (Upper bound)	40.662**	222.177***	-0.034*
	[18.243]	[70.865]	[0.018]
WCommHN missing rate	0.083	0.086	0.047
WHN missing rate	0.075	0.082	0.056

Note: * p<0.1, ** p<0.05, *** p<0.01. Standard errors clustered at the village level in brackets. The outcomes and specifications used to produce these estimates are the same as those presented in Table 4. In both Panels A and B, the Lee bounds reported in the top two rows correspond to the estimate of WCommHN treatment effects with respect to the Control group while those reported in the bottom two rows correspond to the estimate of WCommHN treatment effects with respect to the WHN group.

Table A3e: Program impacts on child health outcomes: Lee bounds.

	Weight-for-age Z-score (1)	Height-for-age Z-score (2)	Birth weight (KGs) (3)
	WCommHN vs. Control		
WCommHN (Lower bound)	-0.025	-0.018	0.198***
	[0.046]	[0.053]	[0.068]
WCommHN (Upper bound)	0.081*	0.077	0.231***
	[0.045]	[0.053]	[0.070]
WCommHN missing rate	0.624	0.626	0.919
Control missing rate	0.617	0.620	0.918
	WCommHN vs. WHN		
WCommHN (Lower bound)	-0.001	-0.021	0.138**
	[0.047]	[0.054]	[0.062]
WCommHN (Upper bound)	0.072	0.097*	0.224***
	[0.047]	[0.055]	[0.063]
WCommHN missing rate	0.624	0.626	0.919
WHN missing rate	0.628	0.633	0.924

Note: * p<0.1, ** p<0.05, *** p<0.01. Standard errors clustered at the village level in brackets. The outcomes and specifications used to produce these estimates are the same as those presented in Table 5. The Lee bounds reported in the top panel correspond to the estimate of WCommHN treatment effects with respect to the Control group. The Lee bounds reported in the bottom panel correspond to the estimate of WCommHN treatment effects with respect to the WHN group. The missing rates are noticeably higher than in Tables A3a-A3d because, in columns (1) and (2), the sample of child-level observations is restricted to children aged 23 months or less at the start of the training programs in February 2013, and in column (3), the sample is restricted to babies born after the start of the intervention. We trim the top 5% of values of this outcome (all of which are > 5KG).

Table A4a: Men's perceptions of changes to spousal relationships and communication (cf. Table 1, col. (1)-(3), and Table 2, col. (1)-(5)).

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
	Relationship improved ASTE	Wife part of household decisions ASTE	Couple makes decisions together ASTE	Discusses FP with spouse	Discusses HIV with spouse	Health & Nutrition discussion ASTE	Discusses HH finance with spouse	Overall discussion ASTE
WCommHN	0.068* [0.041]	-0.045 [0.043]	0.022 [0.043]	0.003 [0.011]	0.035 [0.022]	0.061 [0.045]	0.004 [0.018]	0.070* [0.041]
WHN	0.028 [0.041]	-0.081* [0.043]	-0.074* [0.041]	0.001 [0.011]	0.006 [0.020]	0.042 [0.043]	-0.008 [0.017]	0.032 [0.039]
MHN	0.118*** [0.042]	-0.095** [0.043]	-0.010 [0.042]	0.024** [0.011]	0.025 [0.021]	0.093** [0.043]	0.014 [0.017]	0.116*** [0.040]
Control mean of outcome	0.000 (1.000)	0.000 (1.000)	0.000 (1.000)	0.918 (0.275)	0.702 (0.458)	-0.000 (1.000)	0.747 (0.435)	-0.000 (1.000)
p-value: WCommHN=WHN	0.324	0.385	0.022	0.806	0.161	0.656	0.510	0.318
p-value: WCommHN=MHN	0.226	0.221	0.463	0.037	0.638	0.456	0.570	0.241
p-value: WHN=MHN	0.029	0.725	0.115	0.021	0.339	0.203	0.194	0.022
Observations	5,159	5,050	5,050	4,925	5,176	5,176	5,053	5,059

Note: * p<0.1, ** p<0.05, *** p<0.01. Standard errors clustered at the village level in brackets. The p-values show the results of the test of the null hypothesis of equal treatment effects between the different intervention arms. We report the Control group standard deviation of the outcome variable underneath the Control mean in parentheses. All specifications control for stratum and district fixed effects. Whenever the outcome variable was collected at baseline, we also control for the baseline value of the outcome (columns (2), (3), (4), (7), (8)). Column (1) shows the ASTE of pooling all outcomes collected at endline on whether the relationship improved along the following dimensions, according to the men's reports: husband listens more to wife; wife listens more to husband; husband and wife share more information; husband and wife have fewer arguments; husband is more involved with the family; husband is more likely to share household finances with wife. Column (2) shows the ASTE of the following binary outcomes: woman has a say in: daily household needs; children's health costs; what and how much to feed the children; how to spend her own earnings. Column (3) shows the joint decision-making ASTE, constructed from the same set of questions as column (2), but where each indicator entering the index is equal to 1 if the couple makes the decision together, and 0 otherwise. Note that fewer variables enter this index than the ASTE in Table 1, as the men's survey captures fewer dimensions of women's decision-making power than the women's survey. Column (6), Health and Nutrition discussion ASTE: Very often discusses health and nutrition with spouse; Husband very often suggests types of food to eat; Husband very often makes suggestions about children's health care. Column (8): ASTE of all outcomes in columns (4), (5) and (7) + the 3 outcomes making up the ASTE in column (6).

Table A4b: Program impacts on shared decision-making when both spouses' reports are concordant.

	(1) Wife has a say ASTE	(2) Decisions made jointly ASTE
WCommHN	0.020	0.110**
	[0.044]	[0.049]
WHN	-0.020	0.006
	[0.044]	[0.043]
MHN	-0.062	0.057
	[0.042]	[0.041]
Control mean of outcome	0.000	-0.000
	(1.000)	(1.000)
p-value: WCommHN=WHN	0.365	0.031
p-value: WCommHN=MHN	0.053	0.249
p-value: WHN=MHN	0.314	0.212
Observations	5,247	5,377

Note: * p<0.1, ** p<0.05, *** p<0.01. Standard errors clustered at the village level in brackets. The p-values show the results of the test of the null hypothesis of equal treatment effects between the different intervention arms. We report the Control group standard deviation of the outcome variable underneath the Control mean in parentheses. All specifications control for stratum and district fixed effects, and the baseline value of the outcome. Column (1) shows the ASTE of binary indicators equal to 1 if *both* husband and wife report that the woman has a say in: daily household needs; children's health costs; what and how much to feed the children; how to spend her own earnings. Column (2) shows the joint decision-making ASTE, constructed from the same set of questions as column (1), but where each indicator entering the index is equal to 1 if both spouses report that the couple makes the decision together, and 0 otherwise.

Table A5a: Components of Relationship Improvements Index (cf. Table 1, column (1)).

	(1) Husband listens more to wife	(2) Wife listens more to husband	(3) Share more information	(4) Have fewer arguments	(5) Husband more involved w/ family	(6) Share household finances
WCommHN	0.081***	0.080***	0.087***	0.075***	0.049**	0.067***
	[0.018]	[0.017]	[0.019]	[0.019]	[0.019]	[0.019]
WHN	0.028*	0.005	0.013	0.024	0.009	0.015
	[0.017]	[0.016]	[0.017]	[0.017]	[0.018]	[0.017]
MHN	0.013	0.014	0.014	0.027*	-0.002	0.020
	[0.016]	[0.016]	[0.017]	[0.016]	[0.018]	[0.017]
Control mean of outcome	0.226	0.212	0.254	0.217	0.218	0.252
	(0.419)	(0.409)	(0.436)	(0.412)	(0.413)	(0.434)
p-value: WCommHN=WHN	0.004	0.000	0.000	0.007	0.039	0.008
p-value: WCommHN=MHN	0.000	0.000	0.000	0.008	0.010	0.016
p-value: WHN=MHN	0.356	0.551	0.952	0.820	0.592	0.778
Observations	5,177	5,177	5,177	5,177	5,177	5,177

Note: * p<0.1, ** p<0.05, *** p<0.01. Standard errors clustered at the village level in brackets. Columns (1)-(6) display the estimates of the different groups' impacts on indicators of how marital communication and spousal relationships changed since baseline, according to the women's survey. All specifications control for stratum and district fixed effects. The p-values show the results of the test of the null hypothesis of equal treatment effects between the different intervention arms. We report the Control group standard deviation of the outcome variable underneath the Control mean in parentheses.

Table A5b: Components of Woman's Decision-making Power Index (cf. Table 1, column (2)).

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Wife has a say in:								
	Daily household needs	Major household purchases	Save or spend money	Spending own earnings	Children's health costs	What to feed the children	Schooling expenses	Women's clothing	Children's clothing
WCommHN	0.034	0.038*	0.046**	0.003	0.039*	0.011	0.013	0.018	0.017
	[0.022]	[0.022]	[0.022]	[0.010]	[0.022]	[0.007]	[0.024]	[0.019]	[0.019]
WHN	-0.002	0.024	0.002	-0.001	0.012	0.008	0.013	0.027	0.000
	[0.022]	[0.022]	[0.022]	[0.009]	[0.019]	[0.008]	[0.024]	[0.018]	[0.017]
MHN	0.008	0.044**	0.008	0.002	0.023	-0.005	0.003	0.046**	0.036**
	[0.020]	[0.022]	[0.021]	[0.009]	[0.019]	[0.008]	[0.023]	[0.018]	[0.018]
Control mean of outcome	0.521	0.478	0.494	0.946	0.391	0.956	0.346	0.708	0.680
	(0.500)	(0.500)	(0.500)	(0.227)	(0.488)	(0.206)	(0.476)	(0.455)	(0.467)
p-value: WCommHN=WHN	0.102	0.488	0.044	0.693	0.177	0.681	0.984	0.632	0.396
p-value: WCommHN=MHN	0.218	0.775	0.080	0.985	0.414	0.023	0.613	0.139	0.311
p-value: WHN=MHN	0.607	0.319	0.760	0.688	0.544	0.076	0.628	0.288	0.042
Observations	5,281	5,276	5,143	5,208	5,163	5,155	3,842	5,281	5,169

Note: * p<0.1, ** p<0.05, *** p<0.01. Standard errors clustered at the village level in brackets. The outcomes are binary indicators equal to 1 if the woman reports that the decision is made either jointly or by the woman. In column (7), the sample is restricted by cases of "not applicable" due to children not attending school (some because they are too young). All specifications control for stratum and district fixed effects, and the baseline value of the outcome. The p-values show the results of the test of the null hypothesis of equal treatment effects between the different intervention arms. We report the Control group standard deviation of the outcome variable underneath the Control mean in parentheses.

Table A5c: Components of Joint Decision-making Index (cf. Table 1, column (3)).

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
	Decisions made jointly by couple:								
	Daily household needs	Major household purchases	Save or spend money	Spending own earnings	Children's health costs	What to feed the children	Schooling expenses	Women's clothing	Children's clothing
WCommHN	0.038*	0.046**	0.056**	0.043**	0.054***	-0.008	0.039*	0.020	0.048**
	[0.020]	[0.019]	[0.023]	[0.021]	[0.021]	[0.014]	[0.022]	[0.019]	[0.020]
WHN	-0.010	0.014	-0.002	-0.001	0.009	-0.013	0.018	0.035**	0.005
	[0.020]	[0.018]	[0.021]	[0.019]	[0.018]	[0.013]	[0.022]	[0.017]	[0.020]
MHN	-0.005	0.046**	0.003	0.006	0.025	0.027*	0.019	0.027	0.043**
	[0.019]	[0.019]	[0.021]	[0.019]	[0.018]	[0.014]	[0.021]	[0.018]	[0.020]
Control mean of outcome	0.334	0.315	0.394	0.252	0.277	0.136	0.258	0.224	0.361
	(0.472)	(0.465)	(0.489)	(0.434)	(0.448)	(0.343)	(0.438)	(0.417)	(0.480)
p-value: WCommHN=WHN	0.020	0.074	0.009	0.024	0.021	0.682	0.340	0.406	0.041
p-value: WCommHN=MHN	0.026	0.972	0.012	0.050	0.131	0.010	0.349	0.679	0.828
p-value: WHN=MHN	0.793	0.079	0.816	0.683	0.321	0.002	0.951	0.670	0.066
Observations	5,281	5,276	5,143	5,208	5,163	5,155	3,842	5,281	5,169

Note: * p<0.1, ** p<0.05, *** p<0.01. Standard errors clustered at the village level in brackets. The outcomes are binary indicators equal to 1 if the woman reports that the decision is made jointly by the couple (husband and wife together). In column (7), the sample is restricted by cases of "not applicable" due to children not attending school (some because they are too young). All specifications control for stratum and district fixed effects, and the baseline value of the outcome. The p-values show the results of the test of the null hypothesis of equal treatment effects between the different intervention arms. We report the Control group standard deviation of the outcome variable underneath the Control mean in parentheses.

Table A5d: Components of Husband's Violent Behavior Index (cf. Table 1, column (4)).

	(1)	(2)	(3)	(4)	(5)	(6)	(7)
	Husband less likely to exert violent behavior:						
	Humiliate	Threaten	Insult	Beat	Push	Slap	Other
WCommHN	-0.004	0.018	0.016	0.025**	0.020*	0.041***	0.001
	[0.011]	[0.014]	[0.016]	[0.011]	[0.011]	[0.012]	[0.011]
WHN	-0.007	0.031**	0.014	0.024**	0.022**	0.031***	0.007
	[0.011]	[0.014]	[0.016]	[0.010]	[0.011]	[0.012]	[0.010]
MHN	-0.004	0.031**	0.029*	0.017	0.028***	0.027**	0.001
	[0.010]	[0.014]	[0.016]	[0.011]	[0.011]	[0.012]	[0.010]
Control mean of outcome	0.910	0.849	0.818	0.899	0.895	0.875	0.920
	(0.286)	(0.359)	(0.386)	(0.302)	(0.307)	(0.331)	(0.272)
p-value: WCommHN=WHN	0.771	0.317	0.921	0.897	0.806	0.340	0.544
p-value: WCommHN=MHN	0.999	0.305	0.383	0.431	0.422	0.230	0.998
p-value: WHN=MHN	0.762	0.982	0.352	0.460	0.554	0.734	0.524
Observations	5,179	5,167	5,170	5,171	5,164	5,169	5,168

Note: * p<0.1, ** p<0.05, *** p<0.01. Standard errors clustered at the village level in brackets. All specifications control for stratum and district fixed effects, and the baseline value of the outcome. The p-values show the results of the test of the null hypothesis of equal treatment effects between the different intervention arms. We report the Control group standard deviation of the outcome variable underneath the Control mean in parentheses.

Table A6a: Components of Health and Nutrition Discussion Index (cf. Table 2, column (3)).

	(1)	(2)	(3)
	Spouses discuss family's health & nutrition improvement	Husband makes suggestions about types of food to eat	Husband makes suggestions about children's health care
WCommHN	0.071***	0.058***	0.063***
	[0.020]	[0.019]	[0.020]
WHN	0.021	0.009	0.070***
	[0.019]	[0.019]	[0.021]
MHN	0.010	0.055***	0.048**
	[0.019]	[0.019]	[0.020]
Control mean of outcome	0.650	0.715	0.518
	(0.477)	(0.452)	(0.500)
p-value: WCommHN=WHN	0.007	0.009	0.732
p-value: WCommHN=MHN	0.001	0.888	0.456
p-value: WHN=MHN	0.540	0.013	0.283
Observations	5,191	5,191	5,191

Note: * p<0.1, ** p<0.05, *** p<0.01. Standard errors clustered at the village level in brackets. All specifications control for stratum and district fixed effects, and the baseline value of the outcome. The p-values show the results of the test of the null hypothesis of equal treatment effects between the different intervention arms. We report the Control group standard deviation of the outcome variable underneath the Control mean in parentheses.

Table A6b: Health Knowledge Index: Components (cf. Table 2, column (6))

	Panel A: Female respondents							
	Colostrum important for immunity/growth	Introduce other liquid than breast milk at 6mo.	Introduce other food at 6mo.	Lack of balanced diet impacts child growth	Babies should be breastfed for 24 months	Children should be dewormed every 6 months	Worms can contribute to anemia and malaria	Give ORS if child is vomitting or has diarrhea
WCommHN	0.093***	0.105***	0.069***	0.065***	0.030*	0.026*	-0.004	0.104***
	[0.025]	[0.020]	[0.016]	[0.011]	[0.018]	[0.014]	[0.022]	[0.022]
WHN	0.064***	0.080***	0.066***	0.055***	0.044**	0.050***	0.011	0.128***
	[0.024]	[0.020]	[0.017]	[0.012]	[0.017]	[0.015]	[0.021]	[0.022]
MHN	-0.009	0.018	-0.003	0.037***	-0.020	0.027*	0.027	0.037*
	[0.026]	[0.020]	[0.018]	[0.013]	[0.017]	[0.015]	[0.020]	[0.020]
Control mean	0.525	0.685	0.783	0.865	0.778	0.142	0.611	0.492
	(0.500)	(0.465)	(0.412)	(0.342)	(0.416)	(0.350)	(0.488)	(0.500)
p: WCommHN=WHN	0.216	0.159	0.824	0.321	0.435	0.094	0.499	0.305
p: WCommHN=WHN	0.000	0.000	0.000	0.010	0.005	0.955	0.153	0.002
p: WCommHN=WHN	0.002	0.000	0.000	0.120	0.000	0.140	0.453	0.000
Observations	5,288	5,278	5,269	5,283	5,148	5,281	5,288	5,288
	Boys and girls should both eat as much meat	Low-risk pregnant women should give birth in hospital	Animal protein is not less important for women	Best foods to eat if you have anemia	Water must be boiled for several minutes to make it clean	Male condoms can only be used once	Poor hygiene can impact child's intelligence	Correctly identify healthy food plate for adult
WCommHN	0.024	0.068***	0.013	0.118***	0.081***	0.012**	0.035**	0.028**
	[0.018]	[0.022]	[0.013]	[0.020]	[0.019]	[0.005]	[0.016]	[0.013]
WHN	-0.008	0.025	0.020*	0.101***	0.070***	0.004	0.038**	0.025**
	[0.017]	[0.022]	[0.012]	[0.019]	[0.020]	[0.006]	[0.015]	[0.011]
MHN	-0.002	0.010	0.023*	0.023	0.041**	-0.003	0.025	0.014
	[0.016]	[0.023]	[0.013]	[0.019]	[0.021]	[0.006]	[0.015]	[0.012]
Control mean	0.742	0.571	0.879	0.607	0.622	0.975	0.829	0.890
	(0.437)	(0.495)	(0.326)	(0.489)	(0.485)	(0.157)	(0.377)	(0.313)
p: WCommHN=WHN	0.083	0.056	0.493	0.365	0.562	0.088	0.840	0.864
p: WCommHN=WHN	0.148	0.014	0.380	0.000	0.040	0.007	0.524	0.261
p: WCommHN=WHN	0.726	0.514	0.796	0.000	0.146	0.262	0.376	0.274
Observations	5,288	5,288	5,284	5,288	5,286	5,120	5,283	5,288

Note: * p<0.1, ** p<0.05, *** p<0.01. Standard errors clustered at the village level in brackets. All specifications control for stratum and district fixed effects, and baseline values of the outcome whenever it is available. The p-values show the results of the test of the null hypothesis of equal treatment effects between the different intervention arms. We report the Control group standard deviation of the outcome variable underneath the Control mean in parentheses.

Table A6b (continued): Health Knowledge Index: Components (cf. Table 2, column (7)).

	Panel B: Male respondents							
	Colostrum important for immu-nity/growth	Introduce other liquid than breast milk at 6mo.	Introduce other food at 6mo.	Lack of balanced diet impacts child growth	Babies should be breastfed for 24 months	Children should be dewormed every 6 months	Worms can contribute to anemia and malaria	Give ORS if child is vomitting or has diarrhea
WCommHN	-0.001	0.017	0.010	-0.009	0.025	-0.001	0.007	0.043**
	[0.020]	[0.021]	[0.019]	[0.017]	[0.019]	[0.014]	[0.019]	[0.020]
WHN	-0.018	0.002	-0.012	0.009	0.025	-0.004	0.049**	0.048**
	[0.021]	[0.019]	[0.020]	[0.017]	[0.019]	[0.014]	[0.020]	[0.020]
MHN	0.030	0.085***	0.072***	0.037**	0.071***	0.010	0.013	0.052**
	[0.022]	[0.020]	[0.020]	[0.017]	[0.019]	[0.015]	[0.020]	[0.020]
Control mean	0.387	0.561	0.569	0.788	0.619	0.155	0.622	0.271
	(0.487)	(0.496)	(0.495)	(0.409)	(0.486)	(0.362)	(0.485)	(0.445)
p: WCommHN=WHN	0.371	0.435	0.272	0.296	0.985	0.823	0.034	0.837
p: WCommHN=WHN	0.129	0.001	0.002	0.008	0.016	0.441	0.788	0.677
p: WCommHN=WHN	0.021	0.000	0.000	0.098	0.017	0.329	0.070	0.832
Observations	5,176	5,045	5,048	5,047	5,039	4,830	5,176	5,176
	Boys and girls should both eat as much meat	Low-risk pregnant women should give birth in hospital	Animal protein is not less important for women	Best foods to eat if you have anemia	Water must be boiled for several minutes to make it clean	Male condoms can only be used once	Poor hygiene can impact child's intelligence	Correctly identify healthy food plate for adult
WCommHN	-0.030	0.018	-0.026	-0.011	0.000	-0.007	0.022	0.015
	[0.019]	[0.022]	[0.016]	[0.022]	[0.023]	[0.005]	[0.017]	[0.012]
WHN	0.003	0.010	-0.009	0.015	0.024	-0.002	0.023	-0.000
	[0.019]	[0.021]	[0.015]	[0.021]	[0.023]	[0.005]	[0.015]	[0.012]
MHN	0.014	0.081***	0.000	0.112***	0.043*	0.002	0.040***	0.023**
	[0.018]	[0.019]	[0.016]	[0.021]	[0.022]	[0.005]	[0.015]	[0.011]
Control mean	0.782	0.604	0.849	0.560	0.583	0.985	0.851	0.894
	(0.413)	(0.489)	(0.358)	(0.497)	(0.493)	(0.121)	(0.356)	(0.308)
p: WCommHN=WHN	0.062	0.719	0.274	0.254	0.315	0.425	0.989	0.167
p: WCommHN=WHN	0.007	0.003	0.090	0.000	0.058	0.093	0.237	0.432
p: WCommHN=WHN	0.517	0.000	0.506	0.000	0.400	0.378	0.184	0.033
Observations	5,092	5,176	4,984	5,176	5,046	5,176	5,042	5,176

Note: * p<0.1, ** p<0.05, *** p<0.01. Standard errors clustered at the village level in brackets. All specifications control for stratum and district fixed effects, and baseline values of the outcome whenever it is available. The p-values show the results of the test of the null hypothesis of equal treatment effects between the different intervention arms. We report the Control group standard deviation of the outcome variable underneath the Control mean in parentheses.

**Table A7:** Health Behavior Index: Components (cf. Table 3).

	First health check timing < median	Ever breastfed	Time after birth tried breastfeeding < median	Fed colostrum at birth	Woman ate more when breastfeeding	No other liquids in first week	No other liquids in first 3 months
	Newborn health						
WCommHN	0.013	0.008	0.073**	0.006	0.070***	0.134***	0.115***
	[0.033]	[0.005]	[0.030]	[0.006]	[0.026]	[0.028]	[0.029]
WHN	0.030	0.005	0.053*	0.008	0.111***	0.099***	0.077***
	[0.033]	[0.005]	[0.028]	[0.005]	[0.024]	[0.029]	[0.030]
MHN	0.023	0.003	-0.020	0.003	0.031	0.034	0.032
	[0.034]	[0.006]	[0.029]	[0.006]	[0.027]	[0.029]	[0.029]
Control mean of outcome	0.441	0.988	0.447	0.986	0.397	0.453	0.522
	(0.497)	(0.108)	(0.498)	(0.118)	(0.490)	(0.498)	(0.500)
p-value: WCommHN=WHN	0.601	0.535	0.493	0.644	0.098	0.220	0.209
p-value: WCommHN=MHN	0.759	0.382	0.002	0.448	0.147	0.001	0.004
p-value: WHN=MHN	0.835	0.711	0.009	0.221	0.002	0.030	0.132
Observations	2,455	2,697	2,660	2,681	2,663	2,680	2,619

	No solid foods in first 3 months	Number of vaccinations	Vitamin A in first 6 weeks	Vitamin A in last 6 months	Received antenatal care	Ate more of some foods during this pregnancy	Received iron during last pregnancy or in 2 months after
	Newborn health				**Maternal health**		
WCommHN	-0.006	0.112	0.002	0.051**	-0.001	0.078***	0.061***
	[0.008]	[0.135]	[0.025]	[0.025]	[0.014]	[0.023]	[0.020]
WHN	-0.002	-0.035	0.006	0.022	-0.008	0.094***	0.063***
	[0.008]	[0.139]	[0.021]	[0.025]	[0.014]	[0.023]	[0.021]
MHN	-0.006	0.267*	0.044*	0.083***	0.015	0.061**	0.066***
	[0.008]	[0.138]	[0.023]	[0.025]	[0.014]	[0.024]	[0.020]
Control mean of outcome	0.977	7.396	0.760	0.638	0.908	0.587	0.817
	(0.150)	(2.421)	(0.427)	(0.481)	(0.289)	(0.493)	(0.387)
p-value: WCommHN=WHN	0.671	0.305	0.859	0.268	0.601	0.439	0.909
p-value: WCommHN=MHN	0.997	0.272	0.110	0.222	0.248	0.429	0.770
p-value: WHN=MHN	0.675	0.039	0.099	0.020	0.105	0.140	0.870
Observations	2,578	2,829	2,823	2,830	3,446	3,443	2,836

	Wash hands after toilet (Man)	Wash hands before a meal (Man)	Wash hands after toilet (Woman)	Wash hands before a meal (Man)	Treat drinking water	Sweep latrine at least twice a week	Made improvements to latrine
	Household sanitary practices						
WCommHN	0.024	0.049**	0.081***	0.080***	0.047***	0.102***	0.118***
	[0.021]	[0.022]	[0.022]	[0.022]	[0.010]	[0.021]	[0.023]
WHN	0.027	0.057***	0.066***	0.092***	0.045***	0.071***	0.090***
	[0.023]	[0.021]	[0.022]	[0.021]	[0.010]	[0.021]	[0.023]
MHN	0.032	0.066***	0.014	0.020	0.007	0.028	0.022
	[0.022]	[0.022]	[0.020]	[0.020]	[0.011]	[0.020]	[0.021]
Control mean of outcome	0.332	0.562	0.373	0.575	0.924	0.441	0.326
	(0.471)	(0.496)	(0.484)	(0.495)	(0.265)	(0.497)	(0.469)
p-value: WCommHN=WHN	0.884	0.740	0.511	0.571	0.723	0.116	0.239
p-value: WCommHN=MHN	0.742	0.465	0.002	0.007	0.000	0.000	0.000
p-value: WHN=MHN	0.863	0.664	0.018	0.001	0.000	0.025	0.003
Observations	4,872	5,039	5,133	5,279	5,286	5,175	5,283

Note: * $p<0.1$, ** $p<0.05$, *** $p<0.01$. Standard errors clustered at the village level in brackets. All specifications control for stratum and district fixed effects, and the baseline value of the outcome. Newborn Health: components of the index in Table 3, column (1). Maternal Health: components of the index in Table 3, column (2). Household Sanitary Practices: components of the index in Table 3, column (3). The p-values show the results of the test of the null hypothesis of equal treatment effects between the different intervention arms. We report the Control group standard deviation of the outcome variable underneath the Control mean in parentheses.

Figure A1: Program impacts on children's intake of animal-sourced foods.

Children's intake of animal-sourced foods at endline
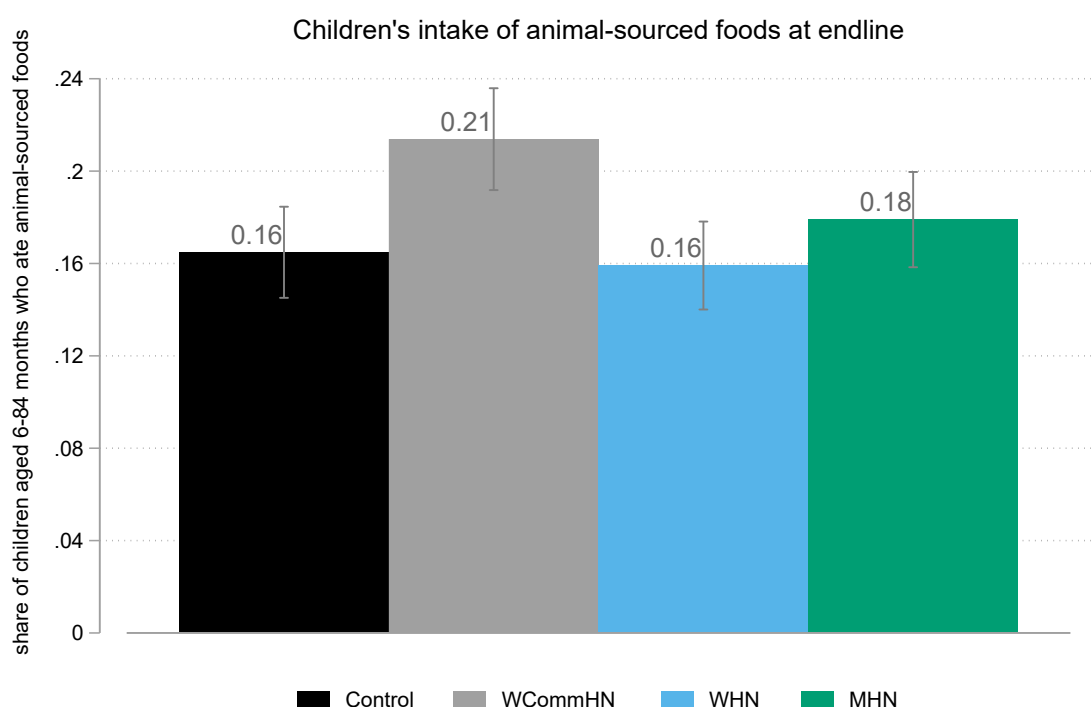
Note: Raw means of the share of households in each group in which children aged 6-84 months ate at least one type of animal-sourced foods (meat, eggs, fish or organ meats) in the past 24 hours, at endline.

Table A8: Program impacts on additional anthropometric outcomes and birth weight by measurement type.

	(1)	(2)	(3)	(4)	(5)
	MUAC-for-age Z-score	Hb level (g/dl)	Birth weight, new babies (KG) (birth card)	Birth weight, new babies (KG) (self-reported)	Weight was read off birth card (yes/no)
WCommHN	0.032	-0.064	0.191**	0.274***	0.086
	[0.047]	[0.064]	[0.086]	[0.105]	[0.054]
WHN	0.057	-0.053	-0.048	0.121	0.122**
	[0.047]	[0.063]	[0.078]	[0.117]	[0.053]
MHN	0.066	-0.012	-0.056	0.069	0.086*
	[0.046]	[0.064]	[0.075]	[0.110]	[0.048]
Control mean of outcome	-0.321	11.408	3.302	3.288	0.449
	(1.014)	(1.306)	(0.531)	(0.678)	(0.499)
p-value: WCommHN=WHN	0.590	0.875	0.001	0.216	0.502
p-value: WCommHN=MHN	0.448	0.457	0.001	0.080	0.997
p-value: WHN=MHN	0.842	0.553	0.899	0.678	0.469
Observations	5,676	5,981	377	341	718

Note: * p<0.1, ** p<0.05, *** p<0.01. Standard errors clustered at the village level in brackets. All specifications control for stratum, district and monthXyear-of-birth fixed effects, as well as the child's gender. In columns (1) and (2), we also control for age-in-months-at-endline dummies. MUAC: Middle-Upper-Arm-Circumference; Hb: Hemoglobin. In columns (1) and (2), the sample is all children aged 23 months or less at the start of the program, who were 42 months or less at endline. In column (1), however, the sample excludes babies who were less than 3 months old at endline because, following the WHO guidelines for measurement of MUAC-for-age Z-scores, these are only defined for children aged 3 months and above. Columns (3) and (4) report effects on the birth weight of babies born after the start of the program (as in Table 5, column (3)) separately by whether the birth weight was read off the baby's birth card (column (3)) or self-reported (column (4)). We trim the top 5% of values of this outcome (all of which are > 5KG). Column (5) shows impacts of each treatment group on the probability that the weight was read off the baby's birth card. The p-values show the results of the test of the null hypothesis of equal treatment effects between the different intervention arms. We report the Control group standard deviation of the outcome variable underneath the Control mean in parentheses.

Appendix B: the WHN and WCommHN programs

B1   Health Curriculum

The Health Curriculum was identical in MHN, WHN and WCommHN villages:

- SESSION 1 – INTRODUCTION, OVERVIEW & BASIC KNOWLEDGE

- SESSION 2 – MATERNAL HEALTH AND CHILD NUTRITION

- SESSION 3 – PRENATAL NUTRITION

- SESSION 4 – BREASTFEEDING

- SESSION 5 – COMPLEMENTARY FEEDING

- SESSION 6 – FOOD GROUPS

- SESSION 7 – MICRONUTRIENTS FOR MOTHERS & CHILDREN

- SESSION 8 – SAFE WATER & SANITATION PRACTICES

- SESSION 9 – FOOD PREPARATION & RECIPES

- SESSION 10 – REVIEW

- SESSION 11 – HIV/AIDS

- SESSION 12 – CONTRACEPTION & FAMILY PLANNING

- SESSION 13 – PRECONCEPTION

- SESSION 14 – PRE & POSTNATAL PRACTICES IN YOUR COMMUNITY

- SESSION 15 – BIRTHING

- SESSION 16 – INFANT ILLNESS & PREVENTATIVE HEALTH PRACTICES

- SESSION 17 – POST-NATAL CARE & BIRTH SPACING

- SESSION 18 – INFANT GROWTH MONITORING & PROMOTION

- SESSION 19 - REVIEW

- SESSION 20 - GRADUATION

Extracts from the Health curriculum

SESSION 6 – FOOD GROUPS

KEY MESSAGES:

1. Foods can be placed into categories according to their nutritional value
2. It is important to get a good mix of these food groups to stay healthy and grow
3. Use the healthy food plate to see how much of each food group you should eat

Food Groups

1. Carbohydrates
   - Bread, rice, cereal (not sugary cereals), wheat, millet, maize, flour, cassava, matooke, sweet potato, yams
   -

2. Fruit and Vegetables
   - All fruits and vegetables are good for you and the most important thing is to get a good variety. One way to tell is to make sure that you eat a lot of different colored fruits and vegetables
   - Vitamin A rich foods are important for babies and young children. These include: mango, papaya, passion fruit, oranges, dark green leafy vegetables, carrots, yellow sweet potato

   and pumpkin

3. Proteins
   - All kinds of meat
   - Milk and foods made from milk such as cheese and yoghurt
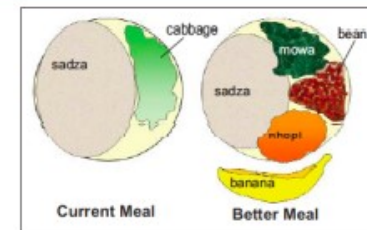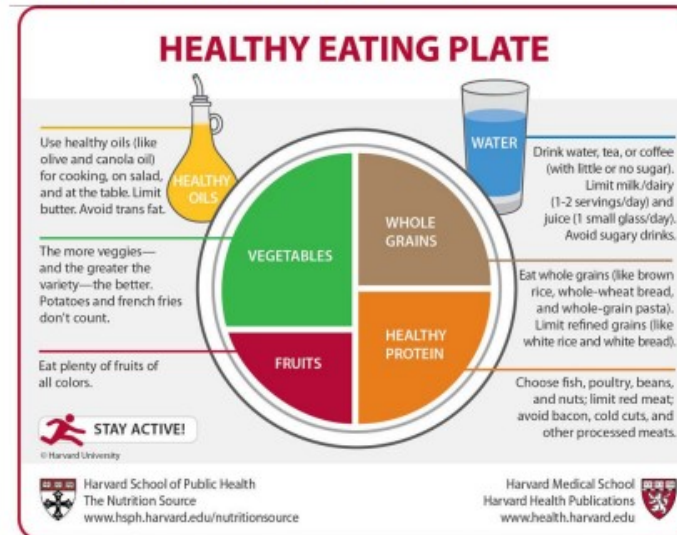   - Eggs
   - Beans, peas and nuts

4. Sugars and Fats
   - Sweets and candies, soda and sugary drinks, oils, margarine and butter (blue band), iodized salt, sugar, ghee

Healthy eating plate

Follow the healthy eating plate to see how much of each food group you should eat. Foods including fruits, vegetables and carbohydrates are very healthy and should be eaten at every meal. Protein from meat and eggs should be eaten often, at least two times per week. Moderate portions of dairy products such as milk and yoghurt should be eaten at least once a week. Sweet food like sugary biscuits and sodas should only be eaten occasionally, as they are not very healthy for the body and do not contain useful nutrients. **Water should be drunk very frequently and is the best thing to drink for adults and children who are no longer breastfeeding.**

HEALTHY EATING PLATE

Use healthy oils (like olive and canola oil) for cooking, on salad, and at the table. Limit butter. Avoid trans fat.

WATER Drink water, tea, or coffee (with little or no sugar). Limit milk/dairy (1-2 servings/day) and juice (1 small glass/day). Avoid sugary drinks.

The more veggies—and the greater the variety—the better. Potatoes and french fries don't count.

Eat whole grains (like brown rice, whole-wheat bread, and whole-grain pasta). Limit refined grains (like white rice and white bread).

Eat plenty of fruits of all colors.

Choose fish, poultry, beans, and nuts; limit red meat; avoid bacon, cold cuts, and other processed meats.

STAY ACTIVE!

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Harvard School of Public Health
The Nutrition Source
www.hsph.harvard.edu/nutritionsource

Harvard Medical School
Harvard Health Publications
www.health.harvard.edu

Current Meal   Better Meal

B2   Communication Curriculum

In addition to the health curriculum described above, women in WCommHN villages also attended the Communication training. The list of modules covered by that curriculum was as follows:

- SESSION 1 – OVERVIEW AND INTRODUCTION
- SESSION 2 – GENERAL COMMUNICATION STRATEGIES
- SESSION 3 – DECISION-MAKING PROCESS
- SESSION 4 – COMMUNICATING INFANT NEEDS
- SESSION 5 – GENERAL NEGOTIATION STRATEGIES
- SESSION 6 – POWER AND PREVENTING CONFLICT
- SESSION 7 – HEALTHY RELATIONSHIPS / HEALTHY FAMILIES
- SESSION 8 – GENDER RELATIONS
- SESSION 9 – FINANCIAL NEGOTIATION
- SESSION 10 – SELF ESTEEM & GOAL SETTING
- SESSION 11 – HIV / AIDS PREVENTION
- SESSION 12 – NEGOTIATING FAMILY PLANNING USE
- SESSION 13 – COMMUNICATING & NEGOTIATING ANTENATAL NEEDS
- SESSION 14 – RESOURCES IN MY COMMUNITY
- SESSION 15 – HOUSEHOLD BUDGETING
- SESSION 16 – HEALTHY CHILDREN
- SESSION 17 – FATHERHOOD
- SESSION 18 – DOMESTIC VIOLENCE
- SESSION 19 – REVIEW
- SESSION 20 – WRAP UP & RECOGNITION CEREMONY

Extracts from the Communication curriculum

Session 2: General Communication Strategies

Communication: To share or exchange information or news. Communication requires a sender, a message, and a recipient.

Modes of Communication:
- *Passive Response*: Behaving passively means not expressing your own needs and feelings, or expressing them so weakly that they will not be heard
  - *Example*: My husband went to the market today to buy food for the family. I asked him to buy carrots and pumpkin for my small children but when he returned home, he had only purchased matooke and some alcohol for himself. Instead of asking him why he didn't purchase the items, I simply take what was purchased and thank him

- *Assertive Response*: Behaving assertively means asking for what you want or saying how you feel in an honest and respectful way, so that it does not infringe on another person's rights or put the individual down
  - *Example*: My husband went to the market today to buy food for the family. I asked him to buy carrots and pumpkin for my small children but when he returned home, he had only purchased matooke and some alcohol for himself. I ask my husband why he didn't purchase the items and he said that they were too expensive and that he likes to eat matooke anyways. I calmly explain to him that carrots and pumpkins are very important for the children because they keep them healthy. Even though they are a bit more expensive, it is very important for our family to be healthy. I ask my husband to please return to the market and buy the items.

- *Aggressive Response*: Behaving aggressively is asking for what you want or saying how you feel in a threatening, sarcastic, or humiliating way that may offend the other person
  - *Example*: My husband went to the market today to buy food for the family. I asked him to buy carrots and pumpkin for my small children but when he returned home, he had only purchased matooke and some alcohol for himself. I immediately accuse my husband of caring more about himself and getting drunk than about our family. We begin arguing and yelling back and forth.

SESSION 9 – FINANCIAL NEGOTIATION

Time/Length: ~45 minutes

Tools/Materials/Readings:
Flip chart or large paper
Markers

Main Education Points:
- Importance of Spending Money on Nutrition and Healthcare
- Negotiating with my Spouse about Spending Money
- Benefits of Saving Money
- Creating a Plan for Health Expenditures

Activities/Assessments:

- Ice-Breaker: "20 Questions" – See Facilitator Notes for Instruction (**5 minutes**)

  Facilitator should then transition by introducing the topic of financial negotiation. Explain that today we will be talking about how spouses can collaborate when deciding what to spend money on. Begin by asking participants the following questions:
  - Think about the last major purchase that your household made. What was it? Did you communicate with your spouse about making this purchase?
  - Do you think it is important for a husband and wife to talk about household purchases? Why?

- Identifying Healthcare Expenses: (**20 minutes**)
  Women should work together in groups of 2 or 3 for this activity.

  Instruct participants that they should come up with a list of the 5 most important things (can be an item or a service) that they can purchase for their children in order to keep them healthy. List the items in order of importance (1 is most important) and estimate the total cost of each item.
  Example: 1.) Vaccinations (10,000 UGX) 2.) De-worming (2,000 UGX) 3.) Hospital Visit (5,000 UGX for transport) 4.) Healthy Food (1,000UGX per week) 5.) Shoes (10,000 UGX)

  After creating the list of items, participants should identify a plan and timeline for how they would be able to purchase all of these items. Specifically, participants should:
  - Identify who will pay for the items. Will one person buy everything? Will both contribute to purchasing these items?
  - When is it possible to purchase the items? Can some be purchased immediately? Will you need to save up for any of the items?
  - How can you ensure that they items are purchased? Can you agree to purchase the next big item at a certain time, like after the next harvest?

  After 10-15 minutes of preparation, have each pair present to the group.

- Group Discussion: (**10 minutes**)
  The facilitator should lead a group discussion around the benefits of saving money. Explain that saving a small amount of money each week is a way to begin collaborating with your spouse financially. Ensure that you have a purpose for saving and that you and your spouse agree on what the money will be used for.