**Table 1: Sample characteristics** 

Households   Households   Inches   Households   Inches   Inches	Table 1: Sample characteristics			1		T
Parademothers   Parademother						
N=748						
Child   Sex: male (0/1)						
Child						P-value <sup>1</sup>
Age in months (range: 6 to 24)         14.2         5.2         14.6         5.1         0.15           Age groups         17.7         14.0         15.0	Child	,		7 6 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7 7		
Age groups	Sex: male (0/1)	49.3		51.0		0.53
6-8.9 months	Age in months (range: 6 to 24)	14.2	5.2	14.6	5.1	0.15
9-11.9 months	Age groups					
12-14.9 months		17.7		14.0		
15-17.9 months						
18-20.9 months						
21-23.9 months						
Decision-maker: child feeding   T2.1   92.2						
Mother		16.7		16.6		0.39
Grandmother	- v					
Other   17.6   7.5   < 0.001	Mother	72.1		92.2		
Mother         Age in years (range: 15-42)         23.6         4.5         26.8         6.1         <0.001           Education: years of formal schooling completed (range: 0-14)         5.9         4.1         4.0         4.1         <0.001						
Age in years (range: 15-42)		17.6		7.5		<0.001
Education: years of formal schooling completed (range: 0-14)						
(range: 0-14)       13.2       18.0       0.01         Participation in wage/salary employment in past 12 months: yes (0/1)       13.2       18.0       0.01         Number of sources from which nutrition information ever heard (range: 0-10)       0.9       1.4       0.76       1.4       0.12         Currently residing in own mother's home: yes (0/1)       4.7       1.8       0.003         Grandmother						
months: yes (0/1)         Number of sources from which nutrition information ever heard (range: 0-10)         0.9         1.4         0.76         1.4         0.12           Currently residing in own mother's home: yes (0/1)         4.7         1.8         0.003           Grandmother	(range: 0-14)		4.1		4.1	
Number of sources from which nutrition information ever heard (range: 0-10)   4.7   1.8   0.003   0.9   1.4   0.76   1.4   0.12   0.003   0.9   0.003   0.00		13.2		18.0		0.01
Currently residing in own mother's home: yes (0/1)         4.7         1.8         0.003           Grandmother         Second poorest         1.8         0.003           Age in years (range: 35-85)²         55.1         9.3         NA         NA           Education: years of formal schooling (range: 0-12)²         0.3         1.2         NA         NA           Household         Number of children under 5 years of age         1.4         0.6         1.4         0.52         0.72           Agro-ecological zone of residency         23.5         27.0         1.4         1.4         0.52         0.72           Mountain         23.5         27.0         51.8         1.5	Number of sources from which nutrition	0.9	1.4	0.76	1.4	0.12
Grandmother         Age in years (range: 35-85)²         55.1         9.3         NA         NA           Education: years of formal schooling (range: 0-12)²         0.3         1.2         NA         NA           Household               Number of children under 5 years of age         1.4         0.6         1.4         0.52         0.72           Agro-ecological zone of residency		4.7		1 Ω		0.003
Age in years (range: 35-85)2   55.1   9.3   NA   NA     Education: years of formal schooling (range: 0-12)3   1.2   NA   NA     Household		4.7		1.0		0.003
Education: years of formal schooling (range: 0-12)²  Household  Number of children under 5 years of age Agro-ecological zone of residency  Mountain  Hill  52.7  Terai  23.8  21.2  0.25  Caste/ethnicity  Dalit  Disadvantaged Janajatis  Disadvantaged non-Dalit Terai  Religious minorities (Muslim/Churoute)  Relatively advantaged Janajatis  5.2  Most advantaged (Brahmin/ Chetri/Thakuri/Sanyasi)  Food security (measured with Household Food Insecurity Access Scale (HFIAS))  Severely food insecure  Moderately food insecure  Mildly food insecure  Poorest  Poorest  Poorest  Second poorest  Middle income  Second wealthiest  D.3  1.2  NA  NA  NA  NA  NA  NA  NA  NA  NA  N		55.1	9.3	NA		NA
12 2 2						
Number of children under 5 years of age		0.3	1.2	INA		INA
Number of children under 5 years of age	,					
Agro-ecological zone of residency         23.5         27.0           Mountain         23.5         27.0           Hill         52.7         51.8           Terai         23.8         21.2         0.25           Caste/ethnicity         23.8         21.2         0.25           Caste/ethnicity         21.9         24.0         21.8           Disadvantaged Janajatis         5.2         3.2         24.0           Disadvantaged non-Dalit Terai         5.2         3.2         5.2           Religious minorities (Muslim/Churoute)         0.8         1.5         5.2           Religious minorities (Muslim/Churoute)         0.8         1.5         5.2         4.8         4.8         4.8         6.2         4.8         6.8 <td< td=""><td></td><td>1.4</td><td>0.6</td><td>1.4</td><td>0.52</td><td>0.72</td></td<>		1.4	0.6	1.4	0.52	0.72
Mountain         23.5         27.0           Hill         52.7         51.8           Terai         23.8         21.2         0.25           Caste/ethnicity         23.8         21.2         0.25           Caste/ethnicity         23.8         21.2         0.25           Disadvantaged Janajatis         21.9         24.0         24.0         24.0         24.0         25         24.0         25         24.0         25         24.0         26         26         27.0         24.0         26         27.0         26         27.0	, ,					
Hill         52.7         51.8           Terai         23.8         21.2         0.25           Caste/ethnicity	· ·	23.5		27.0		
Caste/ethnicity         17.4         21.8           Disadvantaged Janajatis         21.9         24.0           Disadvantaged non-Dalit Terai         5.2         3.2           Religious minorities (Muslim/Churoute)         0.8         1.5           Relatively advantaged Janajatis         5.2         4.8           Most advantaged (Brahmin/         49.5         44.7         0.06           Chettri/Thakuri/Sanyasi)         7         0.06         0						
Dalit         17.4         21.8           Disadvantaged Janajatis         21.9         24.0           Disadvantaged non-Dalit Terai         5.2         3.2           Religious minorities (Muslim/Churoute)         0.8         1.5           Relatively advantaged Janajatis         5.2         4.8           Most advantaged (Brahmin/ Chettri/Thakuri/Sanyasi)         49.5         44.7         0.06           Food security (measured with Household Food Insecurity Access Scale (HFIAS))         8         13.1         13.1           Severely food insecure         5.8         13.1         19.1         19.1           Food secure         82.1         64.7         <0.001	Terai	23.8		21.2		0.25
Disadvantaged Janajatis         21.9         24.0           Disadvantaged non-Dalit Terai         5.2         3.2           Religious minorities (Muslim/Churoute)         0.8         1.5           Relatively advantaged Janajatis         5.2         4.8           Most advantaged (Brahmin/ Chettri/Thakuri/Sanyasi)         49.5         44.7         0.06           Food security (measured with Household Food Insecurity Access Scale (HFIAS))         0.9         3.2           Severely food insecure         5.8         13.1         13.1           Mildly food insecure         11.2         19.1            Food secure         82.1         64.7         <0.001	Caste/ethnicity					
Disadvantaged non-Dalit Terai   5.2   3.2   Religious minorities (Muslim/Churoute)   0.8   1.5   Relatively advantaged Janajatis   5.2   4.8   Most advantaged (Brahmin/ Chettri/Thakuri/Sanyasi)   49.5   44.7   0.06   Chettri/Thakuri/Sanyasi)   Food security (measured with Household Food Insecurity Access Scale (HFIAS))   Severely food insecure   0.9   3.2   Moderately food insecure   5.8   13.1   Mildly food insecure   11.2   19.1   Food secure   82.1   64.7   <0.001   Wealth quintiles   Poorest   20.1   20.0   Second poorest   20.1   20.0   Middle income   19.9   20.0   Second wealthiest   20.1   20.0   Seco	Dalit	17.4		21.8		
Religious minorities (Muslim/Churoute)         0.8         1.5           Relatively advantaged Janajatis         5.2         4.8           Most advantaged (Brahmin/         49.5         44.7         0.06           Chettri/Thakuri/Sanyasi)         Food security (measured with Household Food Insecurity Access Scale (HFIAS))         3.2         3.2           Severely food insecure         5.8         13.1         13.1           Mildly food insecure         11.2         19.1         5.8           Food secure         82.1         64.7         <0.001	Disadvantaged Janajatis	21.9		24.0		
Relatively advantaged Janajatis         5.2         4.8           Most advantaged (Brahmin/ Chettri/Thakuri/Sanyasi)         49.5         44.7         0.06           Food security (measured with Household Food Insecurity Access Scale (HFIAS))         0.9         3.2           Severely food insecure         5.8         13.1           Mildly food insecure         11.2         19.1           Food secure         82.1         64.7         <0.001	Disadvantaged non-Dalit Terai	5.2		3.2		
Most advantaged (Brahmin/ Chettri/Thakuri/Sanyasi)       49.5       44.7       0.06         Food security (measured with Household Food Insecurity Access Scale (HFIAS))       0.9       3.2         Severely food insecure       0.9       3.2         Moderately food insecure       5.8       13.1         Mildly food insecure       11.2       19.1         Food secure       82.1       64.7       <0.001	·	8.0		1.5		
Chettri/Thakuri/Sanyasi)         Chettri/Thakuri/Sanyasi)           Food security (measured with Household Food Insecurity Access Scale (HFIAS))         0.9         3.2           Severely food insecure         5.8         13.1           Mildly food insecure         11.2         19.1           Food secure         82.1         64.7         <0.001		5.2		4.8		
Food security (measured with Household Food Insecurity Access Scale (HFIAS))         0.9         3.2           Severely food insecure         5.8         13.1           Mildly food insecure         11.2         19.1           Food secure         82.1         64.7         <0.001		49.5		44.7		0.06
Severely food insecure         0.9         3.2           Moderately food insecure         5.8         13.1           Mildly food insecure         11.2         19.1           Food secure         82.1         64.7         <0.001	Food security (measured with Household Food					
Moderately food insecure         5.8         13.1           Mildly food insecure         11.2         19.1           Food secure         82.1         64.7         <0.001		0.9		3.2		
Mildly food insecure       11.2       19.1         Food secure       82.1       64.7       <0.001						
Food secure         82.1         64.7         <0.001           Wealth quintiles         20.1         20.0           Poorest         20.1         20.0           Second poorest         20.1         20.0           Middle income         19.9         20.0           Second wealthiest         20.1         20.0	•					
Wealth quintiles         20.1         20.0           Poorest         20.1         20.0           Second poorest         20.1         20.0           Middle income         19.9         20.0           Second wealthiest         20.1         20.0	•					<0.001
Poorest         20.1         20.0           Second poorest         20.1         20.0           Middle income         19.9         20.0           Second wealthiest         20.1         20.0						
Second poorest         20.1         20.0           Middle income         19.9         20.0           Second wealthiest         20.1         20.0		20.1		20.0		
Middle income         19.9         20.0           Second wealthiest         20.1         20.0						
Second wealthiest 20.1 20.0		19.9		20.0		
Wealthiest         19.9         20.0         <0.001	Second wealthiest	20.1		20.0		
	Wealthiest	19.9		20.0		<0.001

 $<sup>^{1}</sup>$  P-values calculated using ANOVA for variables with mean values reported and Chi² for variables with prevalence.  $^{2}$  Data missing for 1-2 individuals (N=747, N=746)

Table 2: Infant and young child feeding: grandmothers' knowledge, maternal knowledge, and household practices

		olds with mothers	w	iseholds rithout dmothers	
	N	%	N	%	P-Value
Grandmothers' knowledge	•				•
Initial breastfeeding: should be within one hour of birth	744	71.2			NA
Colostrum: should be given to child	740	83.1			NA
Each complementary food should be introduced at 6 to 9 me	onths of ag	je:			
Water	743	46.4			NA
Milk and milk products	743	54.9			NA
Semi-solid foods	743	70.7			NA
Solid foods	743	74.2			NA
Eggs	743	49.3			NA
Meat	743	45.1			NA
All 6 complementary foods	743	17.2			NA
Mothers' knowledge					
Initial breastfeeding: should be within one hour of birth	NA	NA	NA	NA	NA
Colostrum: should be given to child	744	92.9	647	90.4	0.17
Each complementary food should be introduced at 6 to 9 mg	onths of ag	je:			
Water	748	54.8	651	54.5	0.92
Milk and milk products	747	66.0	651	63.6	0.35
Semi-solid foods	747	78.2	651	78.6	0.83
Solid foods	747	76.3	651	78.3	0.36
Eggs	747	56.4	651	56.4	0.99
Meat	747	53.5	651	53.3	0.93
All 6 complementary foods	747	27.7	651	27.6	0.98
IYCF practices				l .	_L
Initial breastfeeding: within one hour of birth	748	64.2	651	67.4	0.20
Colostrum: given to child	740	90.1	649	91.1	0.54
Each complementary food introduced at 6 to 9 months of ac	je:			l .	
Water	748	36.9	651	35.8	0.67
Milk and milk products	748	36.6	651	37.6	0.70
Semi-solid foods	748	64.3	651	63.1	0.65
Solid foods	748	70.4	651	67.7	0.27
Eggs	748	51.6	651	51.1	0.87
Meat	748	51.3	651	52.4	0.70
All 6 complementary foods	748	12.6	651	11.5	0.55

Note: NA = Not Available

Table 3: Associations between grandmothers' correct knowledge and correct IYCF practices among children 6 to

24 months of age

24 mondio or ago			Н	ousehold prac	tices		
			Crude <sup>1</sup>			Adjusted <sup>2</sup>	
	N	OR	95% C.I	P-value <sup>3</sup>	OR	95% C.I	P-value <sup>3</sup>
Breastfeeding initiation	740	1.89	(1.17, 3.06)	<0.001	2.16	(1.33, 3.52)	0.002
Colostrum feeding	740	3.84	(2.94, 5.01)	<0.001	4.24	(2.81, 6.40)	<0.001
Timing of introduction of com	plementa	ry foods:					
Water	735	2.46	(1.63, 3.72)	<0.001	2.60	(1.64, 4.11)	<0.001
Milk (other than breast milk)	739	1.92	(1.20, 3.06)	0.007	2.38	(1.49, 3.80)	<0.001
Semi-solid foods	741	3.30	(1.98, 5.50)	<0.001	3.20	(1.88, 5.44)	<0.001
Solid foods	739	3.07	(2.23, 4.26)	<0.001	2.93	(2.08, 4.13)	<0.001
Eggs	739	2.05	(1.34, 3.11)	0.001	2.64	(1.57, 4.43)	<0.001
Meat	739	2.01	(1.46, 2.77)	<0.001	2.46	(1.67, 3.62)	<0.001
All 6 complementary foods	678	2.08	(1.05, 4.12)	0.035	2.55	(1.42, 4.56)	0.002

<sup>&</sup>lt;sup>1</sup> Controlled for district level clustering.

<sup>&</sup>lt;sup>2</sup> Adjusted for district level clustering, all child factors (age, sex, and decision-making on child feeding), maternal factors (age, education, participation in wage/salary employment, number of sources from which nutrition information ever heard, and currently residing in own mother's home), grandmother factors (age and education) and household factors (number of children under 5 years of age, agro-ecological zone of residency, ethnicity, food security, wealth quintiles) and whether the household belonged to the intervention area or not.
<sup>3</sup> From Wald test

Figure 1: Empirical model for direct and indirect effects of grandmothers' knowledge on colostrum feeding and actual practice

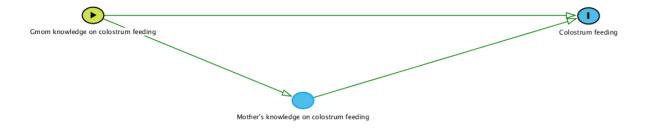


Figure 2: Empirical model for direct and indirect effects of grandmothers' knowledge on timely introduction of complementary foods and actual practice

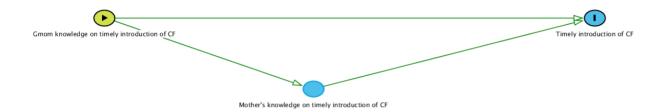


Table 4 Path analysis: exponentiated effects for grandmother's knowledge and colostrum feeding (n=737)

	Colostrum feeding <sup>1</sup>	Maternal knowledge – colostrum feeding <sup>1</sup>
Grandmother's correct knowledge	0.12	2.06***
Mother's correct knowledge	5.30***	NA
Child age		
9-11.9 months	-0.10	0.66
12-14.9 months	0.30	0.45
15-17.9 months	0.61	-0.09
18-20.9 months	0.77	-0.07
21-23.9 months	1.26	0.54
Child sex	0.67	-0.57
Child feeding decision-maker		
Grandmother	0.50	-0.14
Other	-0.68	-0.09
Maternal age	0.01	0.10*
Maternal education		
Some primary	-0.33	0.39
Completed primary	-0.46	0.34
Some secondary	-0.73†	1.45**
Completed secondary	0.85	0.98*
Higher level	-0.63	2.53*
Maternal employment	0.24	-0.68
Maternal nutrition information: number of sources	0.04	-0.14
Maternal residency with own mother	-1.03	1.27
Grandmother's age	0.01	0.01
Grandmother's education		
Some primary	-1.57*	-1.19
Completed primary	14.1***	14.4***
Some secondary	13.8***	13.7***
Completed secondary	13.6***	11.9***
Higher level	13.3***	14.5***
•	10.0	
Household agro-ecological zone of residency Hill	0.19	-1.18†
Terai	0.19	-1.161 -1.09
Household caste/ethnicity	0.51	-1.08
Disadvantaged <i>Janajati</i> s	-0.03	0.62
Disauvantayeu Janajatis	-0.03	0.02

Disadvantaged non-Dalit Terai	0.64	0.00
Religious minorities (Muslim/Churoute)	17.1***	-1.13
Relatively advantaged Janajatis	0.05	-0.43
Most advantaged (Brahmin/ Chettri/Thakuri/Sanyasi)	0.25	0.31
Household food security		
Mildly food insecure	-0.44	0.09
Moderately food insecure	-1.13	-0.43
Severely food insecure	1.61	-1.07
Household socio-economic status		
Second poorest	0.63	-0.20
Middle income	0.01	0.17
Second wealthiest	-0.25	0.86
Wealthiest	0.21	0.54
Household number of children under 5 years of age		
2	0.36	0.19
3 or more	0.27	0.98

<sup>&</sup>lt;sup>1</sup> Adjusted for clustering at district level †p<0.10, \*p<0.05, \*\*p<0.01, \*\*\*p<0.001

Table 5 Path analysis: exponentiated effects for grandmother's knowledge and introduction of complementary foods (n=741)

•	Timely introduction of all complementary foods <sup>1</sup>	Maternal knowledge – introduction of complementary foods <sup>1</sup>
Grandmother's correct knowledge	0.15	2.07***
Mother's correct knowledge	2.50***	NA
Child age		
9-11.9 months	-1.93***	0.62†
12-14.9 months	-1.14***	0.33
15-17.9 months	-1.52***	0.67†
18-20.9 months	-1.72**	0.34
21-23.9 months	-1.22***	0.24
Child sex	-0.63†	0.01
Child feeding decision-maker	·	
Grandmother	-0.76	-0.13
Other	-0.54	0.42
Maternal age	0.03	-0.02
Maternal education		
Some primary	-0.20	0.01
Completed primary	0.55	0.05
Some secondary	-0.37	0.52
Completed secondary	-0.32	0.34
Higher level	-1.40†	0.28
Maternal employment	0.18	0.32
Maternal nutrition information: number of sources	0.01	-0.04
Maternal residency with own mother	0.84	-0.81
Grandmother's age	0.01	0.01
Grandmother's education		
Some primary	0.88	-1.1*
Completed primary	-13.8***	-0.69
Some secondary	3.01***	0.37
Completed secondary	-10.4***	-14.4***
Higher level	-13.0***	0.94
Household agro-ecological zone of residency		
Hill	-0.39	-0.07
Terai	-1.52†	-0.41
Household caste/ethnicity		<b>3</b>
Disadvantaged Janajatis	-0.53	0.02
Disadvantaged non-Dalit Terai	-13.4***	0.63

Religious minorities (Muslim/Churoute)	-12.0***	-14.9***
Relatively advantaged Janajatis	0.03	-0.28
Most advantaged	-0.17	-0.51
(Brahmin/Chettri/Thakuri/Sanyasi)		
Household food security		
Mildly food insecure	0.15	0.09
Moderately food insecure	-0.22	0.15
Severely food insecure	-15.7***	0.20
Household socio-economic status		
Second poorest	-0.69†	0.91**
Middle income	-0.37	0.18
Second wealthiest	-0.72*	0.44†
Wealthiest	-2.30**	0.92*
Household number of children under 5 years of		
age		
2	0.39	0.27
3 or more	-0.22	0.14

Figure 3 Exponentiated coefficients (b) for direct and indirect effects of grandmothers' knowledge on colostrum feeding and actual practice

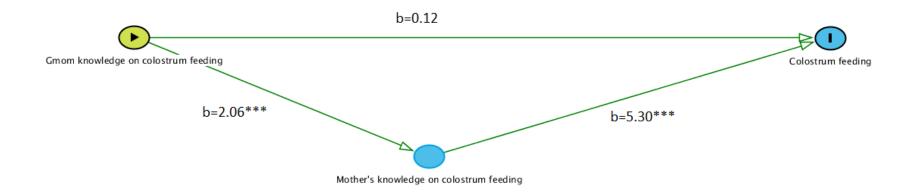
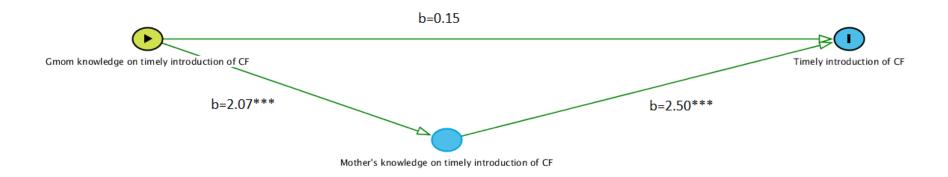


Figure 4: Exponentiated coefficients (b) for direct and indirect effects of grandmothers' knowledge on timely introduction of complementary foods and actual practice



<sup>\*\*\*</sup> p<0.001