

Table 1: Individual, household and community level characteristics for children 0-23 months of age, Tanzania 2010 (n=3112)

Characteristic	n	%
Individual level factors		
Maternal working status		
Non-working	448	14.4
Working (past 12 mo)	2664	85.6
Maternal education		
No education	799	25.7
Primary	2084	67.0
Secondary and above	229	7.4
Partner's occupation		
Non agriculture	907	29.1
Agriculture	1977	63.5
Not working	229	7.3
Partner's education (n=2889)		
No education	534	18.5
Primary	2079	72.0
Secondary and above	276	9.5
Mother's age		
15-19years	1160	37.3
20-34years	1342	43.1
35-49years	611	19.6
Marital status		
Currently married	2637	84.7
Formerly married (div/sep/widow)	263	8.4
Never married	213	6.8
Birth order		
First-born	611	19.6
2nd-4th	1518	48.8
5 or more	983	31.6
Preceding birth interval (n=3106)		
No previous birth	611	19.7
<24 months	358	11.5
>24 months	2137	68.8
Sex of baby		
Male	1539	49.5
Female	1573	50.6
Child's age in months		
0-5 months	837	26.9
6-11 months	793	25.5
12-17 months	772	24.8
18-23 months	710	22.8
Place of delivery		
Home	1528	49.1

Health facility	584	50.9
Mode of delivery (n=3107)		
Non-caesarean	2949	94.9
Caesarean section	158	5.1
Type of delivery assistance (n=3105)		
Health professional	1487	47.9
Traditional birth attendant.	388	12.5
Relatives or untrained people	1229	39.6
Antenatal Clinic visits (n=3104)		
None	65	2.1
1-3 visits	1839	59.2
4+ visits	1201	38.7
Timing of postnatal check-up (n=3058)		
No check-ups (including missing)	2097	68.6
0-2 days	466	15.2
3-6 days	176	5.8
7+ days	319	10.4
Mother's BMI(kg/m²)		
<=18.5	303	9.7
>18.5 - <=24.9	2277	73.2
>24.9 - <=29.9	397	12.8
>=30	135	4.3
Mother's literacy(n=3084)		
Can't read	1273	41.3
Can read	1812	58.7
Mother's frequency of reading newspaper (n=3109)		
Not at all	2702	86.9
Yes	407	13.1
Mother's frequency of listening to radio (n=3109)		
Not at all	1509	48.6
Yes	1600	51.5
Mother's frequency of watching TV		
Not at all	2669	85.8
Yes	443	14.2
Household level factors		
Wealth Index		
Poorest (lowest quintile)	656	21.1
Poorer	751	24.1
Middle	675	21.7
Richer	581	18.7
Richest (highest quintile)	450	14.5
Decisions women have final say		
None	1383	44.4
One-two	577	18.5
Three-four	459	14.8
Five and more	693	22.3

Community level factors**Residence**

Urban	631	20.3
Rural	2481	79.7

Geographical Zone

Northern	451	14.5
Eastern	514	16.5
Western	496	15.9
Southern Highlands	346	11.1
Lake	405	13.0
Southern	222	7.1
Central	594	19.1
Zanzibar	84	2.7
Total	3112	100.0

Weighted total was 3112 otherwise stated within brackets.

Table 3 Rates of early initiation of breastfeeding, exclusive breastfeeding and predominant breastfeeding by individual, household and community level characteristics, Tanzania 2010.

Characteristic	Early initiation of BF rate (0-23 months)			Exclusive breastfeeding rate (<6 months)			Predominant breast feeding (<6 months)		
	%	95% CI	p	%	95% CI	p	%	95% CI	p
Individual level factors									
Maternal working status									
Working (past 12 months)	43.2	[40.49,45.97]	<0.001	48.0	[43.23,52.75]	0.035	17.0	[13.29,21.37]	
Non-working	63.2	[57.15,68.93]		58.9	[49.92,67.39]		16.0	[10.12,24.47]	
Maternal education									
No education	41.7	[36.23,47.30]	<0.001	50.6	[41.94,59.29]		17.6	[11.74,25.78]	
Primary	45.9	[42.91,49.04]		49.8	[44.54,55.04]		17.2	[13.47,21.57]	
Secondary and above	62.7	[55.11,69.73]		47.8	[34.17,61.70]		8.6	[4.104,17.29]	
Partner's education									
No education	45.2	[39.65,50.83]	<0.001	50.3	[36.44,64.07]		24.3	[14.36,38.01]	
Primary	43.7	[40.77,46.64]		52.1	[47.05,57.03]		15.1	[11.69,19.23]	
Secondary and above	62.0	[53.78,69.60]		37.3	[23.76,53.23]		15.5	[7.766,28.65]	
Partner's occupation									
Non agriculture	54.9	[50.08,59.59]	<0.001	49.6	[42.05,57.24]		15.6	[10.78,21.90]	
Agriculture	41.4	[38.52,44.41]		50.7	[44.90,56.55]		18.1	[13.82,23.23]	
Not working	51.5	[43.70,59.26]		44.6	[32.33,57.64]		11.8	[4.373,28.06]	
Mother's age									
15-24years	43.5	[39.63,47.47]	0.027	50.4	[44.38,56.49]		17.0	[12.31,23.03]	
25-34years	49.5	[45.68,53.37]		50.4	[43.73,57.03]		15.3	[10.83,21.29]	
35-49years	43.5	[38.85,48.19]		47.5	[37.96,57.23]		19.5	[12.75,28.69]	
Marital status									
Currently married	45.5	[42.64,48.30]		51.0	[46.12,55.91]		17.3	[13.60,21.71]	
Formerly married (div/sep/widow)	47.0	[39.2,54.98]		42.1	[28.10,57.43]		16.8	[7.713,32.91]	
Never married	52.9	[44.58,60.98]		44.5	[32.09,57.53]		11.9	[4.40,28.23]	

Birth order							
First-born	47.4	[41.98,52.88]		50.1	[41.42,58.79]	13.1	[7.191,22.59]
2nd-4th	47.9	[44.32,51.67]		49.9	[44.19,55.65]	19.0	[14.73,24.14]
5 or more	42.4	[50.91,58.96]		49.7	[42.44,57.01]	15.8	[11.16,22.07]
Preceding birth interval							
No previous birth	47.4	[41.98,52.88]		50.1	[41.42,58.79]	13.1	[7.191,22.59]
<24 months	40.6	[33.62,47.91]		55.4	[43.14,67.03]	22.0	[14.18,32.58]
>24 months	46.7	[43.67,49.82]		48.8	[44.08,53.70]	16.9	[13.48,21.14]
Sex of baby							
Male	44.8	[41.32,48.24]		50.2	[44.47,55.87]	17.9	[13.76,23.14]
Female	47.4	[44.02,50.81]		49.6	[43.51,55.71]	15.5	[11.47,20.72]
Place of delivery							
Home	34.0	[30.99,37.21]	<0.001	50.4	[43.59,57.22]	18.3	[13.88,23.82]
Health facility	57.7	[54.19,61.19]		49.4	[44.38,54.37]	15.2	[11.07,20.58]
Mode of delivery							
Non-caesarean	47.4	[44.60,50.29]	<0.001	49.5	[45.16,53.89]	17.3	[13.88,21.37]
Caesarean section	20.9	[14.12,29.79]		60.1	[40.33,77.14]	4.6	[1.21,16.26]
Type of delivery assistance							
Health professional	58.6	[55.02,62.26]	<0.001	51.1	[45.68,56.43]	14.9	[10.62,20.72]
Traditional birth attendant.	40.2	[34.34,46.37]		40.8	[29.14,53.54]	24.6	[15.41,36.96]
Relatives or untrained people	32.7	[29.35,36.29]		51.1	[44.00,58.05]	16.5	[12.26,21.87]
Antenatal Clinic visits							
None	52.5	[36.46,68.08]	<0.001	47.3	[17.12,79.59]	14.4	[3.594,43.15]
1-3.	42.3	[39.39,45.35]		48.9	[43.89,54.06]	17.5	[13.76,21.87]
4+	51.6	[47.87,55.41]		52.3	[45.13,59.31]	15.3	[10.50,21.86]
Timing of postnatal check-up							
0-2 days	54.9	[49.44,60.41]	<0.001	44.6	[34.89,54.74]	20.8	[13.06,31.58]
3-6 days	62.9	[53.53,71.32]		61.7	[41.52,78.61]	13.7	[4.598,34.17]
7+	51.1	[44.49,57.67]		42.8	[29.27,57.44]	20.9	[10.96,36.18]

No check-ups (including missing)	41.7	[38.64,44.90]		50.9	[45.45,56.37]		16.1	[12.49,20.51]
Mother's literacy								
Can't read	38.9	[35.07,42.88]	<0.001	47.8	[41.59,54.16]		18.6	[13.80,24.68]
Can read	51.1	[47.73,54.38]		51.4	[45.66,57.02]		15.5	[11.75,20.25]
Mother's frequency of reading newspaper								
Not all	44.0	[41.22,46.88]	<0.001	51.0	[46.49,55.53]		16.8	[13.28,21.08]
Yes	59.8	[53.65,65.62]		41.4	[28.78,55.30]		16.8	[8.743,29.86]
Mother's frequency of listening radio								
Not all	41.5	[38.13,45.13]	0.003	53.2	[46.94,59.4]		17.0	[12.27,23.13]
Yes	50.4	[46.96,53.89]		46.1	[34.27,44.69]		16.7	[12.61,21.71]
Mother's frequency of watching TV								
Not all	44.1	[41.32,46.92]	<0.001	51.9	[47.11,56.57]	0.008	16.9	[13.40,21.24]
Yes	58.1	[51.50,64.42]		33.9	[23.61,46.05]		15.4	[8.335,26.73]
Mother's BMI(kg/m²)								
<=18.5	48.4	[40.60,56.18]		54.8	[38.25,70.37]		15.4	[5.26,37.45]
>18.5	45.9	[43.15,48.57]		49.7	[45.24,54.05]		16.9	[13.39,21.02]
Household level factors								
Wealth Index								
Poorest (lowest quintile)	39.3	[34.56,44.22]	<0.001	58.3	[49.21,66.83]	0.028	16.9	[11.13,24.76]
Poorer	42.0	[37.14,47.03]		54.0	[44.94,62.87]		19.6	[13.21,28.11]
Middle	43.8	[38.64,49.07]		51.5	[42.35,60.52]		16.4	[10.53,24.54]
Richer	48.7	[42.19,55.26]		42.5	[33.80,51.61]		17.0	[10.85,25.70]
Richest (highest quintile)	62.9	[56.37,69.06]		37.0	[27.07,48.20]		10.9	[5.086,21.96]
Mother's decision in category								
None	43.1	[39.73,46.54]	0.018	46.6	[40.62,52.77]		19.2	[14.02,25.61]
One.	44.7	[39.85,49.71]		47.8	[37.41,58.46]		17.9	[10.94,27.82]
Two.	51.7	[46.14,57.21]		59.0	[48.10,69.10]		14.8	[9.053,23.18]
Three and more	49.5	[44.41,54.58]		52.9	[44.62,61.03]		12.1	[7.334,19.31]

Community level factors

Residence

Urban	61.2	[54.61,67.47]	<0.001	40.3	[31.06,50.27]	0.034	12.4	[6.75,21.60]
Rural	42.2	[39.47,45.06]		52.2	[47.44,56.92]		17.9	[14.13,22.30]
Geographical Zone								
Northern	39.3	[33.99,44.94]	0.001	44.3	[36.74,52.08]	0.002	18.0	[11.37,27.24]
Eastern	36.5	[30.50,43.15]		66.5	[57.66,74.28]		17.1	[10.45,26.76]
Western	51.4	[44.97,57.68]		53.6	[40.87,65.85]		10.7	[4.96,21.40]
Southern Highlands	53.0	[46.95,58.99]		46.4	[36.39,56.71]		11.6	[5.96,21.61]
Lake	44.2	[36.53,52.17]		40.6	[25.90,57.23]		21.1	[9.46,40.53]
Southern	45.4	[35.66,55.53]		51.6	[36.76,66.24]		13.2	[6.28,25.67]
Central	52.1	[44.65,59.52]		48.9	[39.96,57.85]		19.7	[12.34,30.07]
Zanzibar	49.1	[44.23,53.90]		10.4	[6.218,16.73]		36.7	[29.52,44.57]

Note: BMI, body mass index; CI, confidence interval; TV, television. Chi-square test was applied to test for statistical significance.

Table 4: Unadjusted and adjusted Odds Ratio (OR) for delayed initiation of breastfeeding, non-exclusive breastfeeding and predominant breastfeeding in Tanzania 2010

Outcome variable	Characteristic	Unadjusted odds ratios			Adjusted* odds ratios		
		OR	[95%CI]	<i>p</i>	AOR	[95%CI]	<i>p</i>
<i>Delay initiation of breastfeeding</i>							
	Mother's age						
	15-24 years	1.0			1.0		
	25-34 years	0.7	[0.61, 0.91]	0.003	0.6	[0.52, 0.81]	<0.001
	35-49 years	0.9	[0.76, 1.26]		0.7	[0.55, 0.94]	0.016
	Work status						
	Not working	1.0			1.0		
	Working	2.5	[1.88, 3.31]	<0.001	2.3	[1.62, 3.29]	<0.001
	Mother's education						
	No education	1.0			1.0		
	Primary	0.8	[0.65, 1.09]		1.0	[0.77, 1.32]	
	Secondary or more	0.4	[0.26, 0.60]	<0.001	0.5	[0.33, 0.83]	0.006
	Place of delivery						
	Health facility	1.0			1.0		
	Home	2.8	[2.26, 3.38]	<0.001	1.7	[1.09, 2.62]	0.020
	Mode of delivery						
	Non-caesarean	1.0			1.0		
	Caesarean section	3.2	[1.91,5.35]	<0.001	8.9	[4.72,16.79]	<0.001
	Delivery assistant						
	Health professional	1.0			1.0		
	TBA	2.2	[1.65,2.99]	<0.001	1.4	[0.82,2.28]	
	Relatives/others	3.0	[2.42,3.77]	<0.001	1.9	[1.21,3.08]	0.006
	Area of residence						
	Urban	1.0			1.0		
	Rural	2.2	[1.62,3.10]	<0.001	1.4	[1.00,2.03]	0.047

<i>Non-Exclusive breastfeeding</i>	Geographic zone						
	Western	1.0			1.0		
	Southern Highlands	1.0	[0.67,1.43]		1.1	[0.70,1.65]	
	Central	1.0	[0.69,1.54]		1.2	[0.81,1.76]	
	Lake	1.4	[0.92,2.21]		1.6	[1.02,2.45]	0.042
	Southern	1.5	[0.87,2.45]		1.6	[0.94,2.73]	
	Northern	1.6	[1.13,2.34]	0.009	1.7	[1.14,2.46]	0.009
	Zanzibar	1.1	[0.80,1.55]		2.3	[1.48,3.68]	<0.001
	Eastern	1.9	[1.26,2.80]	0.002	2.1	[1.37,3.26]	0.001
	Child age in months (<6 mo)	1.9	[1.65, 2.18]	<0.001	2.1	[1.78, 2.40]	<0.001
	Delivery Assistance						
	Health professional	1.0			1.0		
	Relatives/other people	1.0	[0.69, 1.47]		1.4	[0.82,2.23]	
	Traditional birth attendants	1.7	[0.98, 3.07]	0.050	2.3	[1.15, 4.57]	0.019
	Area of residence						
	Rural	1.0			1.0		
Urban	1.5	[0.89, 2.36]		2.1	[1.08, 3.89]	0.028	
Geographical Zone							
Central	1.0			1.0			
Eastern	0.4	[0.19,0.66]	0.001	0.3	[0.17,0.62]	0.001	
Western	0.7	[0.37,1.39]		0.6	[0.32,1.28]		
Northern	1.1	[0.68,1.86]		1.4	[0.73,2.77]		
Southern Highlands	1.1	[0.65,2.02]		1.6	[0.84,3.13]		
Southern	1.0	[0.43,2.17]		1.4	[0.50,3.64]		
Lake	1.4	[0.58,3.58]		2.6	[0.91,7.29]		
Zanzibar	8.0	[4.01,15.79]	<0.001	10.8	[5.23,22.22]	<0.001	

*Predominant
breastfeeding*

Geographic Zone

Western	1.0		1.0	
Southern Highlands	1.5	[0.45,4.82]	1.5	[0.45,4.82]
Southern	1.6	[0.47,5.68]	1.6	[0.47,5.68]
Eastern	1.8	[0.57,5.38]	1.8	[0.57,5.38]
Central	2.4	[0.79,7.17]	2.4	[0.79,7.17]
Northern	2.3	[0.76,6.82]	2.3	[0.76,6.82]
Lake	2.6	[0.61,11.03]	2.6	[0.61,11.03]
Zanzibar	4.8	[1.76,13.22]	4.8	[1.76,13.22]
		0.002		0.002

Note: chi-square test was applied to test for statistical significance. The independent variables adjusted for included child sex, child age, mother's age, mother's literacy, mother's employment status, mother's BMI, marital status, father's education, father's occupation, birth order, preceding birth interval, antenatal visits, postnatal visits, mother's access to media (radio, television and newspapers), household wealth index, area of residence and geographical zones.