

**Additional file 2. Distribution of maternal and pregnancy factors between groups of infants**

Characteristic	Category	Level	Parasite negative N = 459 n (%)	Only- asymptomatic N = 87 n (%)	Only- symptomatic N = 444 n (%)	Alternating N = 274 n (%)	Overall P-value	Parasite negative vs. Only- symptomatic P- value	Parasite negative vs. Only- asymptomatic P- value	Parasite negative vs. Alternating P-value	Only- asymptomatic vs. Only- symptomatic P- value	Only- asymptomatic vs. Alternating P- value
<b>Age of mother</b>	<b>Years</b>	Median (IQR <sup>e</sup> )	26 (22, 31)	27 (23, 32)	27 (21, 32)	26 (21, 31)	0.810	0.817	0.398	0.753	0.536	0.339
	<b>Age groups</b>	< 20	58 (12.7)	11 (12.6)	82 (18.8)	41 (15.2)	0.094	<b>0.017</b>	0.912	0.576	0.479	0.465
		20 – 29	272 (59.6)	52 (59.8)	227 (51.9)	156 (57.8)						
		30 – 40	116 (25.4)	21 (24.1)	110 (25.2)	70 (25.9)						
		> 40	10 (2.2)	3 (3.4)	18 (4.1)	3 (1.1)						
<b>Pregnancy</b>	<b>Gravidity</b>	Primagravidae	89 (19.4)	13 (14.9)	76 (17.1)	45 (16.4)	0.620	0.377	0.329	0.315	0.620	0.743
		Multigravidae	370 (80.6)	74 (85.1)	368 (82.9)	229 (83.6)						
	<b>Parity</b>	0	89 (19.4)	13 (14.9)	76 (17.1)	45 (16.4)	0.140	0.057	0.758	<b>0.032</b>	0.702	0.833
		1	85 (18.5)	17 (19.5)	76 (17.1)	44 (16.1)						
		2	93 (20.3)	15 (17.2)	73 (16.4)	38 (13.9)						
		3	62 (13.5)	14 (16.1)	52 (11.7)	47 (17.2)						
	≥ 4	130 (28.3)	28 (32.2)	167 (37.6)	100 (36.5)							
<b>Sickle cell trait/disease</b>		Yes	452 (99.6)	86 (98.9)	436 (99.5)	272 (100.0)	0.500	0.971	0.415	0.273	0.434	0.077
		No	2 (0.4)	1 (1.1)	2 (0.5)	0 (0.0)						
<b>ANC<sup>a</sup> attendance</b>	<b>Start (months)</b>	Median (IQR)	4 (3, 5)	4 (3, 5)	5 (3, 5)	4 (3, 6)	<b>&lt;0.001</b>	<b>&lt; 0.001</b>	0.072	<b>&lt; 0.001</b>	0.595	0.192
	<b>Visits</b>	Median (IQR)	5 (4, 7)	4 (3, 5)	5 (3, 6)	4 (3, 6)	<b>&lt;0.001</b>	<b>&lt; 0.001</b>	<b>&lt; 0.001</b>	<b>&lt; 0.001</b>	<b>0.039</b>	0.618
<b>Tetanus immunization</b>	<b>Frequency</b>	Median (IQR)	1 (1, 2)	1 (0, 1)	1 (1, 2)	1 (0, 1)	<b>0.006</b>	0.146	<b>0.004</b>	<b>0.002</b>	0.089	0.407
<b>IPTp<sup>b</sup></b>	<b>Doses</b>	0	28 (6.1)	6 (6.9)	16 (3.6)	17 (6.2)	<b>0.022</b>	<b>0.024</b>	0.177	<b>0.005</b>	0.495	0.870
		1	42 (9.2)	14 (16.1)	63 (14.2)	40 (14.7)						
		2	110 (24.0)	23 (26.4)	118 (26.6)	85 (31.1)						
		3	278 (60.7)	44 (50.6)	246 (55.5)	131 (48.0)						
	<b>DOTs<sup>d</sup></b>	Yes	402 (93.3)	73 (90.1)	413 (95.8)	247 (95.7)	0.092	0.099	0.315	0.181	<b>0.032</b>	0.055
	No	29 (6.7)	8 (9.9)	18 (4.2)	11 (4.3)							
<b>ITN<sup>c</sup> use during pregnancy</b>	<b>Overall</b>	Yes	226 (49.5)	52 (61.2)	223 (50.6)	122 (45.4)	0.084	0.739	<b>0.047</b>	0.286	0.073	<b>0.011</b>
		No	231 (50.5)	33 (38.8)	218 (49.4)	147 (54.6)						
	<b>Rural</b>	Yes	152 (46.5)	43 (59.7)	191 (49.5)	108 (43.7)	0.110	0.594	<b>0.042</b>	0.511	0.079	<b>0.017</b>
	No	175 (53.5)	29 (40.3)	203 (51.5)	139 (56.3)							

	<b>Urban</b>	Yes	74 (56.9)	9 (69.2)	34 (68.1)	14 (63.6)	0.510	0.129	0.391	0.555	0.991	0.736
		No	56 (43.1)	4 (30.8)	15 (31.9)	8 (36.4)						
<b>Placental malaria</b>	<b>Overall</b>	Negative	299 (65.1)	58 (66.7)	271 (61.0)	165 (60.2)	<b>0.018</b>	0.136	0.097	<b>0.040</b>	<b>0.010</b>	<b>0.030</b>
		Past	138 (30.1)	23 (26.4)	143 (32.2)	84 (30.7)						
		Chronic	10 (2.2)	0 (0.0)	21 (4.7)	17 (6.2)						
		Acute	12 (2.6)	6 (6.9)	9 (2.0)	8 (2.9)						
	<b>Rural</b>	Negative	215 (65.3)	51 (68.9)	244 (61.6)	154 (61.1)	0.870	0.470	0.068	0.173	<b>0.026</b>	<b>0.040</b>
		Past	98 (29.8)	18 (24.3)	124 (31.3)	75 (29.8)						
		Chronic	9 (2.7)	0 (0.0)	19 (4.8)	16 (6.3)						
		Acute	7 (2.1)	5 (6.8)	9 (2.3)	7 (2.8)						
	<b>Urban</b>	Negative	84 (64.6)	7 (53.8)	27 (56.3)	11 (50.0)	0.530	0.141	0.812	0.347	0.236	0.857
		Past	40 (30.8)	5 (38.5)	19 (39.6)	9 (40.9)						
		Chronic	1 (0.8)	0 (0.0)	2 (4.2)	1 (4.5)						
		Acute	5 (3.8)	1 (7.7)	0 (0.0)	1 (4.5)						
<b>Delivery</b>	<b>Gestational age</b>	Pre-term	6 (1.3)	1 (1.1)	3 (0.7)	0 (0.0)	0.570	0.572	0.804	0.164	0.608	0.161
		Term	399 (87.1)	78 (89.7)	385 (86.7)	238 (87.8)						
		Late	53 (11.6)	8 (9.2)	56 (12.6)	33 (12.2)						
	<b>Place</b>	Health facility	320 (69.7)	59 (67.8)	259 (58.3)	149 (54.4)	<b>0.002</b>	<b>0.004</b>	0.806	<b>&lt; 0.001</b>	0.268	0.081
		Private maternity home	17 (3.7)	2 (2.3)	28 (6.3)	12 (4.4)						
		Home/TBA <sup>f</sup>	121 (26.4)	26 (29.9)	156 (35.1)	113 (41.2)						
		On the way to HF/PMH/TBA <sup>f</sup>	1 (0.2)	0 (0.0)	1 (0.2)	0 (0.0)						

<sup>a</sup> ANC = antenatal care, <sup>b</sup> IPTp = intermittent preventive treatment during pregnancy, <sup>c</sup> ITN = insecticide treated bed-net, <sup>d</sup> DOTs = direct observed therapy, <sup>e</sup> IQR = interquartile range, <sup>f</sup> HF = health facility PMH = private maternity home, TBA= traditional birth attendant