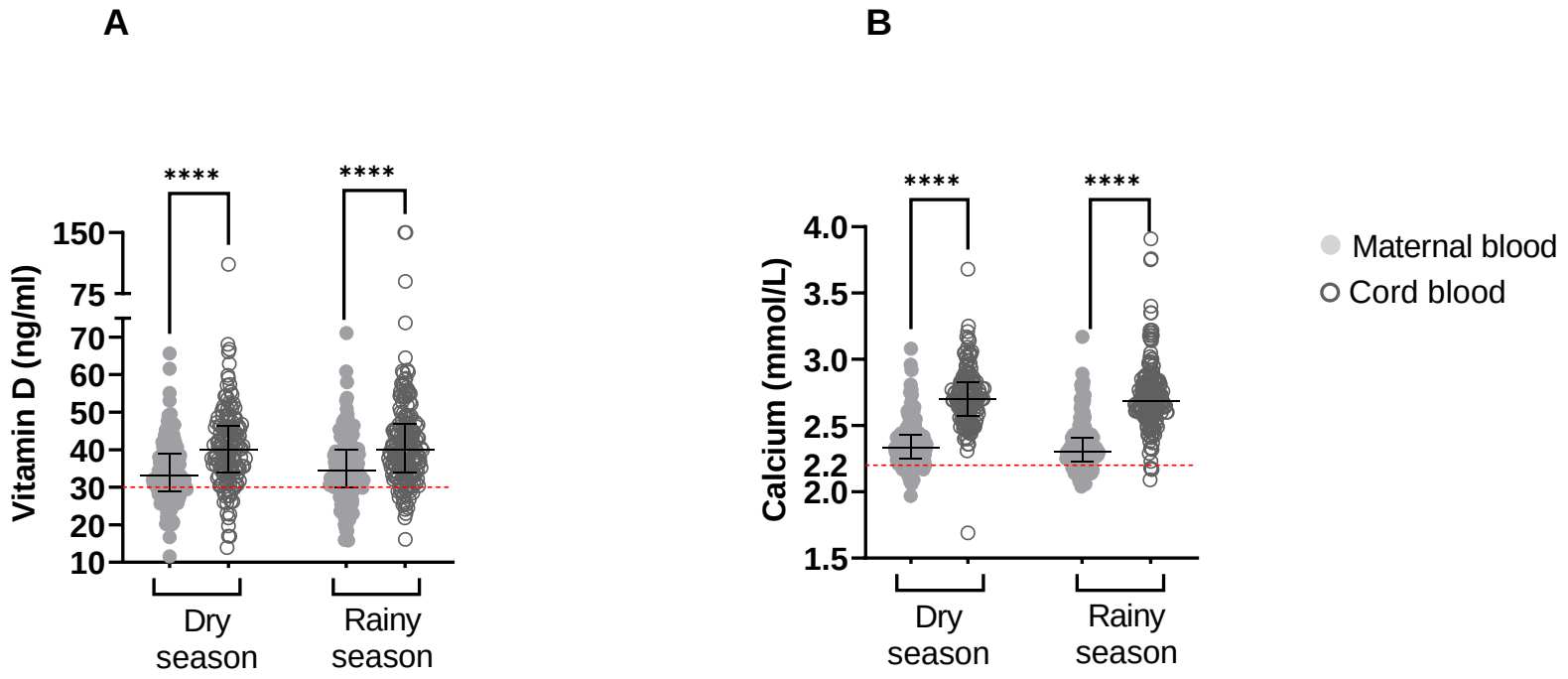
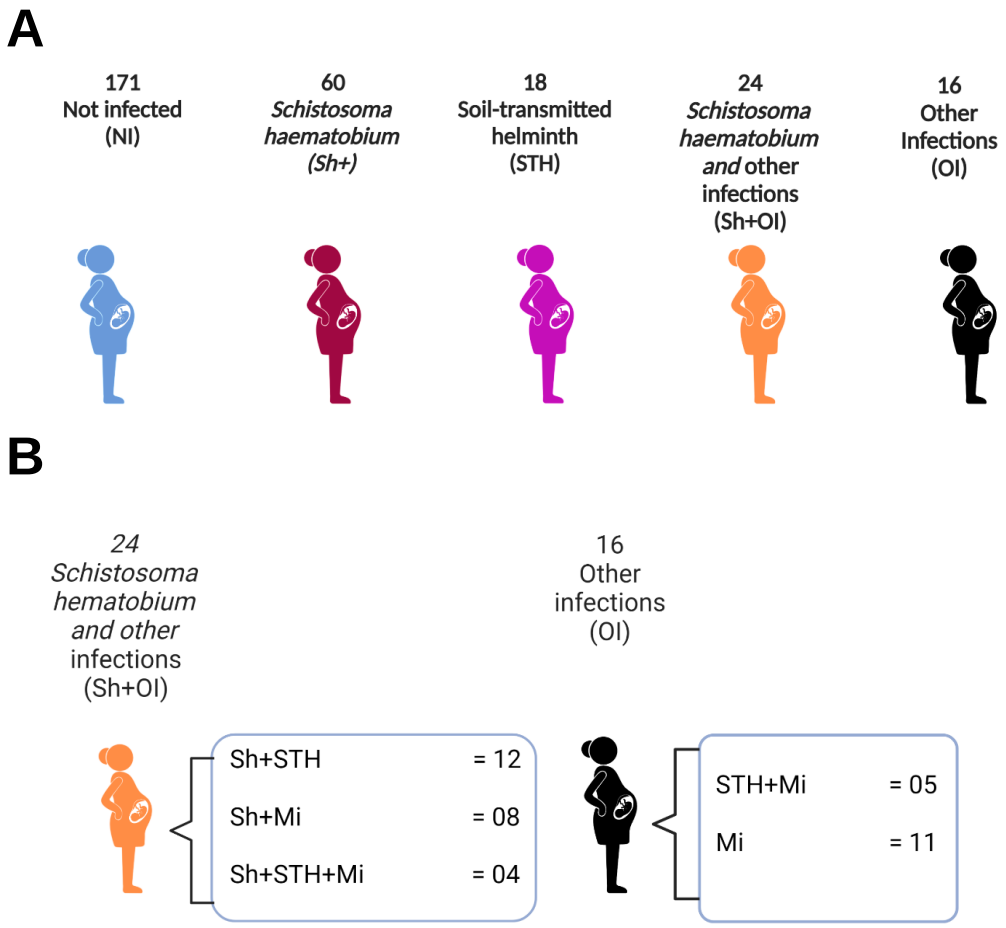


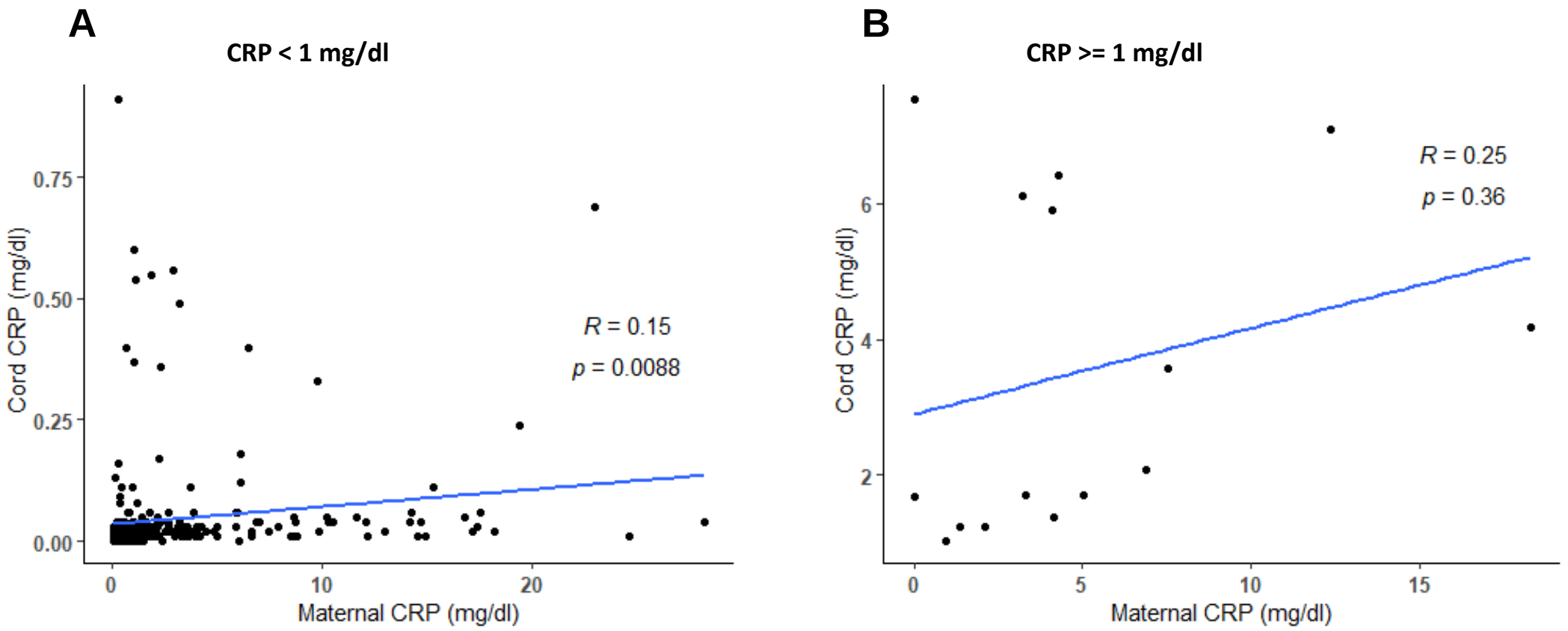
Suppl. Figure 1: Seasonal VitD and Ca^{2+} levels

(A) overall VitD level in all the cohort according to the dry and rainy season; (B) overall Ca^{2+} level in the cohort according to the dry and rainy season; n (maternal) = 328; n (cord) = 328 VitD concentration Insufficiency: < 30ng/mL, Ca^{2+} concentration Insufficiency: < 2,2mmol/L. Data are shown with median and interquartile range. P values are for Wilcoxon matched-pairs-Test. P value: * = < 0,05; ** = < 0,01; *** = < 0,001; **** = < 0,0001.



Suppl. Figure 2: Parasitological infection status of the mothers at recruitment

(A) Illustration describing the parasitological status in 5 major groups: Not infected (NI) =171 women, *S. haematobium* (*Sh)* infected group (*Sh+*) = 60 women, soil-transmitted-helminths group (STH+) = 18 women, *Schistosoma haematobium and* coinfected group (*Sh+*OI) = 24 women and group with other infections (OI) = 16 women. (B) detailed shutdown within the (*Sh+*OI) group: *Schistosoma haematobium* (*Sh+*) and soil-transmitted-helminths (STH+) = 12 women; *Schistosoma haematobium* (*Sh+*), soil-transmitted-helminths (STH+) and microfilaria (Mi+) = 4 women; *Schistosoma haematobium* (*Sh+*) and microfilaria (Mi+) = 08 women. The OI group: 05 women soil-transmitted-helminths (STH+) and microfilaria (Mi+) infections; 11 women microfilaria (Mi+) infections.



Suppl. Figure 3: Correlation between maternal and cord CRP

Data are shown as correlation between maternal and cord CRP by Pearson's correlation; (A) CRP cord < 1 mg/dl; (B) CRP cord >= 1 mg/dl.

Suppl Table 1: Maternal characteristics at birth (N = 375)

Variable		N	%
Maternal age group (years)	13 - 17	29	7.7
	18 - 29	241	64
	30 - 45	105	28
	Median (IQR)	24 (20 to 30)	-
Gravidity	Primigravidae	93	25
	Multigravidae	276	74
Parity	Primiparity	76	20
	Multiparity	190	51
Season	Dry	157	42
	Rainy	218	58
Maternal VitD	Insufficient (10-29 ng/ml)	105	28
	Sufficient (30 -100 ng/ml)	270	72
Maternal calcium	Insufficient (< 2.2 mmol/l)	56	15
	Sufficient (2.2-2.6 mmol/l)	284	76
	Toxic (> 2.6 mmol/l)	35	9.3
Maternal CRP (mg/dl)	Normal[<1mg/dl]	162	43
	Moderate [1-10 mg/dl]	182	49
	Higher [>10 mg/dl]	31	8.3
Calcium supplementation	Yes	228	61
	No	144	38
Vitamin D supplementation	Yes	228	61
	No	144	38
Maternal VitD	Low (< 30 ng/ml)	105	28
	Adequate (> 30 ng/ml)	270	72
Maternal calcium	Abnormal	91	24
	Normal	284	76

Data are presented as median with IQR (n) for maternal age, values or as proportions (%) and 95% confidence intervals where indicated, missing data for each variable were not taken into analysis.

Suppl Table 1. Overall maternal characteristics at birth

Data are presented as median with IQR (n) for maternal age, values or as proportions (%) and 95% confidence intervals where indicated; Khi2 test was performed for the percentage comparison; blood for serum parameters was taken from maternal venous blood, missing data for each variable were not taken into the analysis.

Suppl Table 2: Newborn characteristics at birth (N = 328)

Variable		N	%
Sex	Female	150	46
	Male	176	54
Gestational age (weeks)	Preterm [< 37 weeks]	41	12
	Normal [>= 37 weeks]	275	84
	Median (IQR)	39 (38 to 40)	-
Birth weight (g)	Low [< 2500g]	14	4.3
	Normal [>= 2500g]	291	89
	Median (IQR)	3000 (2717.5 to 3300)	-
Birth length (cm)	Abnormal [<45; >54cm]	13	4
	Normal[45-54cm]	303	92
	Median (IQR)	49 (48 to 51)	-
Head circumference (cm)	Abnormal [<30; >38cm]	12	3.7
	Normal[30-38cm]	308	94
	Median (IQR)	33 (32 to 34)	-
Cord serum VitD	Deficient (< 10 ng/ml)	5	1.5
	Insufficient (10-29 ng/ml)	33	10
	Sufficient (30 -100 ng/ml)	287	88
	Toxic (> 100 ng/ml)	3	0.91
Cord serum calcium	Insufficient (< 2.2 mmol/l)	5	1.5
	Sufficient (2.2-3 mmol/l)	291	89
	Toxic (> 3 mmol/l)	32	9.8
Cord serum CRP (mg/dl)	Normal[<1mg/dl]	313	95
	Moderate [1-10 mg/dl]	15	4.6
Cord serum VitD	Low (< 30 ng/ml)	38	12
	Adequate (> 30 ng/ml)	290	88
Cord serum calcium	Normal	291	89
	Abnormal	37	11

Data are presented as median with IQR (n) for gestational age at birth, birth weight, birth length, head circumference, values or as proportions (%) and 95% confidence intervals where indicated, missing data for each variable were not taken into analysis

Suppl Table 2. Overall newborn characteristics at birth

Data are presented as median with IQR (n) for gestational age at birth, birth weight, birth length, head circumference, values or as proportions (%) and 95% confidence intervals where indicated; Khi2 test was performed for the percentage comparison; serum parameters were determined from cord blood, missing data for each variable were not taken into the analysis.

Suppl Table 3: Association between mother's clinical characteristics and the maternal VitD level

Variable		Total	Adequate (> 30 ng/ml)	Low (< 30 ng/ml)	p. overall	OR [95%CI]	p. ratio
Maternal age group (years)					0.490		
	13 - 17	29 (7.73%)	23 (8.52%)	6 (5.71%)		1	
	18 - 29	241 (64.3%)	175 (64.8%)	66 (62.9%)		1.23 [0.55;3.41]	0.459
	30 - 45	105 (28.0%)	72 (26.7%)	33 (31.4%)		1.49 [0.64;4.36]	0.270
Gravidity					0.956		
	Multigravidae	276 (74.8%)	199 (74.5%)	77 (75.5%)		1	
	Primigravidae	93 (25.2%)	68 (25.5%)	25 (24.5%)		0.92 [0.57;1.62]	0.858
Parity					0.913		
	Multiparity	190 (71.4%)	137 (71.0%)	53 (72.6%)		1	
	Primiparity	76 (28.6%)	56 (29.0%)	20 (27.4%)		0.89 [0.51;1.69]	0.804
Maternal Hemoglobin					0.963		
	HB < 11	214 (69.3%)	151 (68.9%)	63 (70.0%)		1	
	HB >= 11	95 (30.7%)	68 (31.1%)	27 (30.0%)		0.92 [0.56;1.63]	0.863
Maternal CRP					0.741		
	Normal[<1mg/dl]	162 (43.2%)	115 (42.6%)	47 (44.8%)		1	
	Moderate [1-10 mg/dl]	182 (48.5%)	134 (49.6%)	48 (45.7%)		0.85 [0.55;1.40]	0.587
	Higher [>10 mg/dl]	31 (8.27%)	21 (7.78%)	10 (9.52%)		1.09 [0.53;2.67]	0.711
Maternal Neutrophils					0.727		
	Abnormal	23 (8.16%)	15 (7.54%)	8 (9.64%)		1	
	Normal	259 (91.8%)	184 (92.5%)	75 (90.4%)		0.68 [0.31;1.80]	0.557
Maternal Eosinophils					1.000		
	Abnormal	14 (4.95%)	10 (4.98%)	4 (4.88%)		1	
	Normal	269 (95.1%)	191 (95.0%)	78 (95.1%)		0.81 [0.31;2.98]	0.998
S. haematobium					0.815		
	Non-infected	233 (68.3%)	166 (67.8%)	67 (69.8%)		1	
	Positive	108 (31.7%)	79 (32.2%)	29 (30.2%)		0.88 [0.55;1.52]	0.723
STH					0.249		
	Non-infected	233 (86.9%)	166 (88.8%)	67 (82.7%)		1	
	Positive	35 (13.1%)	21 (11.2%)	14 (17.3%)		1.55 [0.81;3.43]	0.189
Microfilaria					1.000		
	Non-infected	233 (87.9%)	166 (87.8%)	67 (88.2%)		1	
	Positive	32 (12.1%)	23 (12.2%)	9 (11.8%)		0.92 [0.45;2.23]	0.959
Any Infection					0.765		
	Non-infected	233 (62.1%)	166 (61.5%)	67 (63.8%)		1	
	Positive	142 (37.9%)	104 (38.5%)	38 (36.2%)		0.88 [0.57;1.45]	0.681

Data are presented as Odd ratios (OR) and 95% confidence intervals for VitD, *P* value significative < 0,05, blood for serum parameters was taken from maternal peripheral vein blood or from cord blood, respectively, missing data for each variable were not taken into analysis

Suppl Table 3: Association between mother's clinical characteristics and the maternal VitD level

Data are presented as Odd ratios (OR) and 95% confidence intervals for VitD, *P* value significative < 0,05, blood for serum parameters was taken from maternal peripheral vein blood or from cord blood, respectively, missing data for each variable were not taken into analysis

Suppl Table 4: Association between mother's clinical characteristics and maternal Ca^{2+} level

Variable		Total	Normal	Abnormal	p. overall	OR [95%CI]	p. ratio
Maternal age group (years)					**0.031**		
	13 -17	29 (7.73%)	20 (7.04%)	9 (9.89%)		1	
	18-29	241 (64.3%)	193 (68.0%)	48 (52.7%)		0.49 [0.24;1.24]	0.184
	30 - 45	105 (28.0%)	71 (25.0%)	34 (37.4%)		0.94 [0.44;2.49]	0.905
Gravidity					0.959		0.859
	Multigravidae	276 (74.8%)	208 (74.6%)	68 (75.6%)		1	
	Primigravidae	93 (25.2%)	71 (25.4%)	22 (24.4%)		0.92 [0.55;1.65]	
Parity					0.425		0.345
	Multiparity	190 (71.4%)	142 (70.0%)	48 (76.2%)		1	
	Primiparity	76 (28.6%)	61 (30.0%)	15 (23.8%)		0.70 [0.39;1.41]	
Maternal Hemoglobin					0.481		0.404
	HB < 11	214 (69.3%)	157 (68.0%)	57 (73.1%)		1	
	HB >= 11	95 (30.7%)	74 (32.0%)	21 (26.9%)		0.76 [0.45;1.39]	
Maternal CRP					**0.010**		
	Normal [<1mg/dl]	162 (43.2%)	130 (45.8%)	32 (35.2%)		1	
	Moderate [1-10 mg/dl]	182 (48.5%)	137 (48.2%)	45 (49.5%)		1.28 [0.80;2.21]	0.273
	High [>10 mg/dl]	31 (8.27%)	17 (5.99%)	14 (15.4%)		3.06 [1.50;7.37]	**0.005**
Maternal Neutrophils					1.000		0.798
	Abnormal	23 (8.16%)	17 (7.94%)	6 (8.82%)		1	
	Normal	259 (91.8%)	197 (92.1%)	62 (91.2%)		0.76 [0.33;2.19]	
Maternal Eosinophils					0.340		0.332
	Abnormal	14 (4.95%)	9 (4.21%)	5 (7.25%)		1	
	Normal	269 (95.1%)	205 (95.8%)	64 (92.8%)		0.47 [0.18;1.61]	
S. haematobium					0.548		0.464
	Non-infected	233 (68.3%)	179 (69.4%)	54 (65.1%)		1	
	Positive	108 (31.7%)	79 (30.6%)	29 (34.9%)		1.18 [0.73;2.06]	
STH					1.000		0.989
	Non-infected	233 (86.9%)	179 (86.9%)	54 (87.1%)		1	
	Positive	35 (13.1%)	27 (13.1%)	8 (12.9%)		0.93 [0.45;2.33]	
Microfilaria					0.995		0.803
	Non-infected	233 (87.9%)	179 (88.2%)	54 (87.1%)		1	
	Positive	32 (12.1%)	24 (11.8%)	8 (12.9%)		1.04 [0.49;2.64]	
Any Infection					0.612		0.529
	Non-infected	233 (62.1%)	179 (63.0%)	54 (59.3%)		1	
	Positive	142 (37.9%)	105 (37.0%)	37 (40.7%)		1.14 [0.72;1.89]	

Data are presented as Odd ratios (OR) and 95% confidence intervals for Ca^{2+}, *P* value significance < 0,05, blood for serum parameters was taken from maternal peripheral vein blood or from cord blood, respectively, missing data for each variable were not taken into analysis

Suppl Table 4. Effects of maternal biometric parameters on maternal Ca^{2+} level: Data are presented as Odd ratios (OR) and 95% confidence intervals for Ca^{2+}, *P* value significative < 0,05, blood for serum parameters was taken from maternal peripheral vein blood or from cord blood, respectively, missing data for each variable were not taken into the analysis.

Suppl Table 5: Association of maternal and newborn characteristics with cord VitD level

Variable		Total	Adequate	Low	p. overall	OR [95%CI]	p. ratio
Gender					0.296		0.231
	Female	150 (46.0%)	129 (44.8%)	21 (55.3%)		1	-
	Male	176 (54.0%)	159 (55.2%)	17 (44.7%)		0.62 [0.34;1.29]	
Birth weight (g)					0.667		0.701
	Low [< 2500g]	14 (4.59%)	12 (4.44%)	2 (5.71%)		1	-
	Normal [>= 2500g]	291 (95.4%)	258 (95.6%)	33 (94.3%)		0.51 [0.16;2.64]	
Birth length (cm)					0.649		0.623
	Abnormal [<45; >54cm]	13 (4.11%)	11 (3.93%)	2 (5.56%)		1	-
	Normal[45-54cm]	303 (95.9%)	269 (96.1%)	34 (94.4%)		0.46 [0.14;2.42]	
Head circumference (cm)					0.160		0.201
	Abnormal [<30; >38cm]	12 (3.75%)	9 (3.19%)	3 (7.89%)		1	-
	Normal[30-38cm]	308 (96.2%)	273 (96.8%)	35 (92.1%)		0.29 [0.10;1.26]	
Gestational age (weeks)					0.799		0.670
	Normal [>= 37 weeks]	275 (87.0%)	241 (86.7%)	34 (89.5%)		1	-
	Preterm [< 37 weeks]	41 (13.0%)	37 (13.3%)	4 (10.5%)		0.72 [0.30;2.38]	
Maternal age group (years)					0.795		
	13 -17	27 (8.23%)	23 (7.93%)	4 (10.5%)		1	-
	18-29	210 (64.0%)	186 (64.1%)	24 (63.2%)		0.59 [0.23;2.05]	0.596
	30 - 45	91 (27.7%)	81 (27.9%)	10 (26.3%)		0.56 [0.20;2.22]	0.589
Gravidity					0.845		0.687
	Multigravidae	238 (73.7%)	211 (74.0%)	27 (71.1%)		1	-
	Primigravidae	85 (26.3%)	74 (26.0%)	11 (28.9%)		1.11 [0.57;2.48]	
Parity					**0.039**		**0.030**
	Multiparity	164 (70.7%)	150 (73.2%)	14 (51.9%)		1	-
	Primiparity	68 (29.3%)	55 (26.8%)	13 (48.1%)		2.32 [1.13;5.63]	
Maternal Hemoglobin					0.997		0.854
	HB < 11	184 (67.2%)	162 (66.9%)	22 (68.8%)		1	-
	HB >= 11	90 (32.8%)	80 (33.1%)	10 (31.2%)		0.87 [0.43;2.05]	
S. haematobium					1.000		0.996
	Non-infected	198 (65.6%)	175 (65.5%)	23 (65.7%)		1	-
	Positive	104 (34.4%)	92 (34.5%)	12 (34.3%)		0.94 [0.49;2.10]	
STH					0.769		0.806
	Non-infected	198 (86.5%)	175 (86.6%)	23 (85.2%)		1	-
	Positive	31 (13.5%)	27 (13.4%)	4 (14.8%)		1.04 [0.41;3.62]	
Microfilaria					0.754		0.665
	Non-infected	198 (87.6%)	175 (87.9%)	23 (85.2%)		1	-
	Positive	28 (12.4%)	24 (12.1%)	4 (14.8%)		1.17 [0.46;4.09]	

Data are presented as Odd ratios (OR) and 95% confidence intervals for VitD, P value significance < 0,05, blood for serum parameters was taken from maternal peripheral vein blood or from cord blood, respectively, missing data for each variable were not taken into analysis

Suppl Table 5. Effects of maternal and/or newborn biometric parameters on cord VitD level: Data are presented as Odd ratios (OR) and 95% confidence intervals for VitD, *P* value significative < 0,05, blood for serum parameters was taken from maternal peripheral vein blood or from cord blood, respectively, missing data for each variable were not taken into the analysis.

Suppl Table 6: Association of cord Ca^{2+} level with maternal and newborn characteristics

Variable		Total	Normal	Abnormal	p. overall	OR [95%CI]	p. ratio
Gender					0.868		
	Female	150 (46.0%)	132 (45.7%)	18 (48.6%)		1	
	Male	176 (54.0%)	157 (54.3%)	19 (51.4%)		0.84 [0.45;1.74]	0.735
Birth weight (g)					0.661		
	Low [< 2500g]	14 (4.59%)	12 (4.43%)	2 (5.88%)		1	
	Normal [>= 2500g]	291 (95.4%)	259 (95.6%)	32 (94.1%)		0.49 [0.15;2.55]	0.673
Birth length (cm)					0.649		
	Abnormal [<45; >54cm]	13 (4.11%)	11 (3.93%)	2 (5.56%)		1	
	Normal[45-54cm]	303 (95.9%)	269 (96.1%)	34 (94.4%)		0.46 [0.14;2.42]	0.623
Head circumference (cm)					1.000		
	Abnormal [<30; >38cm]	12 (3.75%)	11 (3.86%)	1 (2.86%)		1	
	Normal[30-38cm]	308 (96.2%)	274 (96.1%)	34 (97.1%)		0.68 [0.17;5.48]	0.857
Gestational age (weeks)					0.786		
	Normal [>= 37 weeks]	275 (87.0%)	246 (87.2%)	29 (85.3%)		1	
	Preterm [< 37 weeks]	41 (13.0%)	36 (12.8%)	5 (14.7%)		1.11 [0.48;3.34]	0.727
Maternal age group (years)					0.169		
	13 -17	27 (8.23%)	22 (7.56%)	5 (13.5%)		1	
	18-29	210 (64.0%)	191 (65.6%)	19 (51.4%)		0.36 [0.15;1.18]	0.158
	30 - 45	91 (27.7%)	78 (26.8%)	13 (35.1%)		0.60 [0.23;2.11]	0.591
Gravidity					0.992		
	Multigravidae	238 (73.7%)	212 (73.9%)	26 (72.2%)		1	
	Primigravidae	85 (26.3%)	75 (26.1%)	10 (27.8%)		1.03 [0.52;2.39]	0.819
Parity					0.312		
	Multiparity	164 (70.7%)	149 (72.0%)	15 (60.0%)		1	
	Primiparity	68 (29.3%)	58 (28.0%)	10 (40.0%)		1.58 [0.75;4.01]	0.229
Maternal Hemoglobin					0.498		
	HB < 11	184 (67.2%)	166 (68.0%)	18 (60.0%)		1	
	HB >= 11	90 (32.8%)	78 (32.0%)	12 (40.0%)		1.33 [0.67;3.08]	0.384
S. haematobium					0.321		
	Non-infected	198 (65.6%)	174 (64.4%)	24 (75.0%)		1	
	Positive	104 (34.4%)	96 (35.6%)	8 (25.0%)		0.57 [0.28;1.42]	0.241
STH							
	Non-infected	198 (86.5%)	174 (85.7%)	24 (92.3%)	0.544	1	
	Positive	31 (13.5%)	29 (14.3%)	2 (7.69%)		0.46 [0.16;2.35]	0.382
Microfilaria							
	Non-infected	198 (87.6%)	174 (89.7%)	24 (75.0%)	**0.037**	1	
	Positive	28 (12.4%)	20 (10.3%)	8 (25.0%)		2.65 [1.20;7.30]	0.034

Data are presented as Odd ratios (OR) and 95% confidence intervals for Ca^{2+}, *P* value significance < 0,05, blood for serum parameters was taken from maternal peripheral vein blood or from cord blood, respectively, missing data for each variable were not taken into analysis

Suppl Table 6. Effects of maternal and/or newborn biometric parameters on cord Ca^{2+} level: Data are presented as Odd ratios (OR) and 95% confidence intervals for Ca^{2+}, *P* value significative <

0,05, blood for serum parameters was taken from maternal peripheral vein blood or from cord blood, respectively, missing data for each variable were not taken into the analysis.

Suppl Table 7A: Maternal and cord blood VitD levels according to maternal supplementation during pregnancy

Variable		VitD supplement N = 228	No VitD supplement N = 144	p-value
Maternal Blood				
	Insufficient (10-29 ng/ml)	59 (25.9%)	44 (30.6%)	0.343
	Sufficient (30 -100 ng/ml)	169 (74.1%)	100 (69.4%)	-
	Median (IQR)	33.9 (29.9 to 39.7)	34.3 (28.6 to 40.5)	0.927
Cord Blood				
	Deficient (< 10 ng/ml)	3 (1.3%)	2 (1.4%)	0.844
	Insufficient (10-29 ng/ml)	18 (7.9%)	14 (9.7%)	-
	Sufficient (30 -100 ng/ml)	177 (77.6%)	108 (75.0%)	-
	Toxic (> 100 ng/ml)	1 (0.4%)	2 (1.4%)	-
	Median (IQR)	38.8 (34.2 to 45.5)	41.1 (33.7 to 47.7)	0.184

Data are presented as Odd ratios (OR) and 95% confidence intervals for VitD, *P* value significative < 0,05, blood for serum parameters was taken from maternal peripheral vein blood or from cord blood, respectively, missing data for each variable were not taken into analysis

Suppl Table 7A: Maternal and Cord Blood VitD D level according to maternal supplementation in pregnancy: Data are presented as Odd ratios (OR) and 95% confidence intervals for VitD, *P* value significative < 0,05, blood for serum parameters was taken from maternal peripheral vein blood or from cord blood, respectively, missing data for each variable were not taken into analysis.

Suppl Table 7B: Median levels of maternal VitD compared to cord VitD

Variable		Maternal VitD	Cord VitD	p-value
Vitamin D supplement	Median (IQR)	33.9 (29.9 to 39.7)	38.8 (34.2 to 45.5)	<0.001
No vitamin D supplement	Median (IQR)	34.3 (28.6 to 40.5)	41.1 (33.7 to 47.7)	<0.001

Data are presented as median with IQR for VitD, *P* value significative < 0,05, blood for serum parameters was taken from maternal peripheral vein blood or from cord blood, respectively, missing data for each variable were not taken into analysis

Suppl Table 7B: Maternal VitD compare to Cord VitD*:* Data are presented as median with IQR for VitD, P value significative < 0,05, blood for serum parameters was taken from maternal peripheral vein blood or from cord blood, respectively, missing data for each variable were not taken into analysis.

Suppl Table 8A: Maternal and cord blood calcium levels according to maternal supplementation during pregnancy

Variable		Calcium supplement N = 228	No calcium supplement N = 144	p-value
Maternal Blood				
	Insufficient (< 2.2 mmol/l)	31 (13.6%)	23 (16.0%)	0.742
	Sufficient (2.2-2.6 mmol/l)	174 (76.3%)	109 (75.7%)	-
	Toxic (> 2.6 mmol/l)	23 (10.1%)	12 (8.3%)	-
	Median (IQR)	2.3 (2.2 to 2.4)	2.3 (2.2 to 2.4)	0.208
Cord Blood				
	Insufficient (< 2.2 mmol/l)	3 (1.3%)	2 (1.4%)	0.974
	Sufficient (2.2-3 mmol/l)	178 (78.1%)	111 (77.1%)	-
	Toxic (> 3 mmol/l)	18 (7.9%)	13 (9.0%)	-
	Median (IQR)	2.7 (2.6 to 2.8)	2.7 (2.6 to 2.8)	0.755

Data are presented as Odd ratios (OR) and 95% confidence intervals for Ca^{2+}, *P* value significative < 0,05, blood for serum parameters was taken from maternal peripheral vein blood or from cord blood, respectively, missing data for each variable were not taken into analysis

Suppl Table 8A: Maternal and Cord Blood Calcium level according to maternal supplementation in pregnancy: Data are presented as Odd ratios (OR) and 95% confidence intervals for Ca^{2+}, P value significative < 0,05, blood for serum parameters was taken from maternal peripheral vein blood or from cord blood, respectively, missing data for each variable were not taken into analysis.

Suppl Table 8B: Median levels of maternal calcium compared to cord calcium

Variable		Maternal calcium	Cord calcium	p-value
Calcium supplement	Median (IQR)	2.3 (2.2 to 2.4)	2.7 (2.6 to 2.8)	<0.001
No Calcium supplement	Median (IQR)	2.3 (2.2 to 2.4)	2.7 (2.6 to 2.8)	<0.001

Data are presented as median with IQR for Ca^{2+}, *P* value significative < 0,05, blood for serum parameters was taken from maternal peripheral vein blood or from cord blood, respectively, missing data for each variable were not taken into analysis

Suppl Table 8B: Maternal calcium compare to Cord: Data are presented as median with IQR for Ca^{2+}, *P* value significative < 0,05, blood for serum parameters was taken from maternal peripheral vein blood or from cord blood, respectively, missing data for each variable were not taken into analysis.

Suppl Table 9: Serum CRP level according to gravidity and parity

		Maternal CRP at birth (N = 375)			Cord CRP (N = 328)	
Variable		**Normal[<1mg/dl]**	**Moderate [1-10 mg/dl]**	**Higher [>10 mg/dl]**	**Normal[<1mg/dl]**	**Moderate [1-10 mg/dl]**
Gravidity						
	Primigravidae	36 (22.6%)	50 (27.8%)	7 (23.3%)	80 (26.0%)	5 (33.3%)
	Multigravidae	123 (77.4%)	130 (72.2%)	23 (76.7%)	228 (74.0%)	10 (66.7%)
Parity						
	Primiparity	32 (27.1%)	37 (29.1%)	7 (33.3%)	65 (29.3%)	3 (30.0%)
	Multiparity	86 (72.9%)	90 (70.9%)	14 (66.7%)	157 (70.7%)	7 (70.0%)
Age Group						
	<18	13 (8.0%)	14 (7.7%)	2 (6.5%)	22 (7.0%)	5 (33.3%)
	18-29	102 (63.0%)	118 (64.8%)	21 (67.7%)	204 (65.2%)	6 (40.0%)
	>=30	47 (29.0%)	50 (27.5%)	8 (25.8%)	87 (27.8%)	4 (26.7%)

Data are presented as values or as proportions (%) where indicated, missing data for each variable were not taken into analysis.

Suppl Table 9: Serum CRP level according to gravidity and Parity: Data are presented as values or as proportions (%) where indicated, missing data for each variable were not taken into analysis.

Suppl Table 10: Unadjusted and multivariable logistic regression investigating the association between VitD concentrations with maternal serum CRP levels (N = 375)

		Univariable			Bivariable		Multivariable	
Variable		**CRP<1 (n = 145)**	**CRP>=1 (n = 183)**	**p-value**	**cOR[95%CI]**	**p-value**	**aOR[95%CI]**	**p-value**
Maternal VitD				0.642		0.642		0.342
	Sufficient (30 -100 ng/ml)	102 (70%)	133 (73%)		1		1	
	Insufficient (10-29 ng/ml)	43 (30%)	50 (27%)		0.89 [0.55, 1.45]		0.74 [0.40, 1.37]	
Cord VitD				0.008				
	Sufficient (30 -100 ng/ml)	120 (83%)	167 (91%)		1		1	
	Insufficient (10-29 ng/ml)	21 (14%)	12 (6.6%)		0.41 [0.19, 0.85]	0.02	0.25 [0.08, 0.70]	0.012
	Deficient (< 10 ng/ml)	1 (0.7%)	4 (2.2%)		2.87 [0.42, 56.6]	0.348	1.87 [0.23, 39.0]	0.595
	Toxic (> 100 ng/ml)	3 (2.1%)	0 (0%)		0 [NA]	0.985	0 [NA]	0.985

Data are presented as values or as proportions (%), core odd ratios (cOR), adjusted odd ratios (aOR), p value < 0,05 and 95% confidence intervals where indicated for VitD and adjusted by age group, parity and *Sh* infection status, blood for serum parameters was taken from maternal peripheral vein blood or from cord blood, respectively, missing data for each variable were not taken into analysis

Suppl Table 10: Unadjusted and Multivariate logistic regression investigating the association between VitD concentrations with maternal serum CRP levels: Data are presented as values or as proportions (%), core odd ratios (cOR), adjusted odd ratios (aOR), p value < 0,05 and 95% confidence intervals where indicated for VitD and adjusted by age group, parity and *Sh* infection status, blood for serum parameters was taken from maternal peripheral vein blood or from cord blood, respectively, missing data for each variable were not taken into analysis

Suppl Table 11: Unadjusted and multivariable logistic regression investigating the association between VitD concentrations with maternal eosinophils (N = 375)

		Univariable			Bivariable		Multivariable	
Variable		**Normal**	**Abnormal**	**p-value**	**cOR[95%CI]**	**p-value**	**aOR[95%CI]**	**p-value**
Maternal VitD				1		0.935		0.056
	Sufficient (30 -100 ng/ml)	168 (70%)	9 (69%)		1		1	
	Insufficient (10-29 ng/ml)	71 (30%)	4 (31%)		1.05 [0.28, 3.34]		5.72 [1.03, 44.4]	
Cord VitD				0.342				
	Sufficient (30 -100 ng/ml)	207 (87%)	11 (85%)		1		1	
	Insufficient (10-29 ng/ml)	26 (11%)	1 (7.7%)		0.72 [0.04, 3.96]	0.761	2.41 [0.12, 18.6]	0.453
	Deficient (< 10 ng/ml)	4 (1.7%)	1 (7.7%)		4.7 [0.23, 35.4]	0.182	18.66 [0.00, Inf]	0.057
	Toxic (> 100 ng/ml)	2 (0.8%)	0 (0%)		0 [NA]	0.994	0 [NA]	0.996

Eosinophils data are presented as values or as proportions (%), core odd ratios (cOR), adjusted odd ratios (aOR), 95% confidence intervals and p value < 0,05 where indicated, Neutrophils is Normal if Eosinophils abs: [0.0 - 1.3]; missing data for each variable were not taken into analysis.

Suppl Table 11: Unadjusted and Multivariate logistic regression investigating the association between VitD concentrations with maternal Eosinophils : Eosinophils data are presented as values or as proportions (%), core odd ratios (cOR), adjusted odd ratios (aOR), 95% confidence intervals and p value < 0,05 where indicated, Neutrophils is Normal if Eosinophils abs: [0.0 - 1.3]; missing data for each variable were not taken into analysis.