

Additional file 1. Characteristics of studied population according to place and mode of delivery.

		C-section (n=65)	Hospital Vaginal birth (n=92)	Home birth (n=23)	p-value
MATERNAL DATA					
Maternal age (years)		35.5 [33-38]	34 [31-37]	34 [32-36]	.056
Pre-gestational BMI (Kg/cm²)		23.19 [21.5-25.9] ^a	21.69 [20.37-23.85] ^b	22.77 [19.75-24.77] ^{ab}	.027*
Weight gain over pregnancy (Kg)		13.42 ± 4.91	12.16 ± 4.01	13 ± 4.33	.315
Antibiotics during pregnancy		27 (41.5%) ^a	31 (34%) ^a	1 (4.34%) ^b	<.001*
Antibiotics during delivery		65 (100%) ^a	10 (10.9%) ^b	0 (0%) ^c	<.001*
NEONATAL DATA					
Delivery	Gestational age (weeks)	39 [38-40] ^a	40 [39-40] ^a	40 [39-41] ^b	.004*
	Neonatal weight (g)	3305 [2925-3710]	3200 [2965-3440]	3360 [3145-3630]	.140
	Infant length (cm)	50 [48-51] ^b	49.5 [48.5-51] ^b	52 [50.25-53] ^a	.003*
Sex					
Female		22 (33.8%)	52 (57.2%)	12 (52.17%)	
Male		43 (66.15%)	39 (42.8%)	11 (47.83%)	
Siblings		28 (43.08%)	34 (37%)	10 (43.4%)	.588
BMI z-score		0.22 [-0.52-0.86] ^a	-0.29 [-0.88-0.2] ^b	-0.37 [-1.03-0.13] ^{ab}	.015*
W/L z-score		0.26 [-0.55-0.96] ^a	-0.19 [-0.87-0.31] ^b	-0.51 [-1.52-0.16] ^b	.002*
7 days	Infant weight (g)	3275 [2845-3585] ²	3200 [2975-3530] ⁴	3480 [3290-3620]	.126
	Infant length (cm)	50.75 [49-52] ^{2b}	51 [49-51.5] ^{4b}	52 [51-53] ^a	.028*
	Infants antibiotics	0 (0%) ^{2a}	7(7.7%) ^{3b}	0 (0%) ^a	<.001*
	Exclusive breastfeeding	73.5% ^a	61.29% ^a	95.5% ^b	<.001*
31 days	Infant weight (g)	4150 [3650-4728]	4100 [3685-4438] ¹	4540 [3935-4810]	.054
	Infant length (cm)	53.75 [52-55.5] ^b	53.5 [52-55.5] ^{1b}	55.5 [54.25-57.5] ^a	.013*
	Infants antibiotics	3 (4.6%) ²	5 (5.5%) ⁴	1 (4.34%)	.922
	BMI z-score	-0.45 [-1.24-0.65]	-0.65 [-1.27-0.16] ¹	-0.52 [-1.035-0.175]	.552
	W/L z-score	-0.19 [-0.89-0.55]	-0.54 [-0.54-0.34]	[-0.85- -1.275]	.104
	Exclusive breastfeeding	67.6% ^a	61.29% ^a	95.5% ^b	<.001*
18 moths	Infant weight (Kg)	11 [10.04-11.85]	10.85 [10.85-11.54]	10.85 [9.75-11.54]	.158
	Infant length (cm)	82 [79.5-83]	81.5 [81.5-83.5]	81.5 [79-83.5]	.818
	BMI z-score	0.44 [0.22-0.58] ^{7a}	0.31 [0.13-0.41] ^{7b}	-0.13 [-0.36—0.05] ^c	<0.001*
	W/L z-scores	0.39 [0.15-0.56] ^{7a}	0.26 [0.05-0.38] ^{7b}	-0.17 [-0.34- -0.02] ^c	<0.001*

Normally distributed data was presented as mean ± SD and non-normal data as median [IQR]. Categorical variables were expressed as positive cases (percentage). Data no sharing letters was significantly different between studied groups. Number of missing values for each variable was represented as a superscript. Z-scores of anthropometric measures were electronically computed using WHO Anthro software (www.who.int/childgrowth/software/en/). Z-scores values were adjusted by breastfeeding duration, antibiotic intake during the first year of life, maternal pre-gestational BMI and infant BMI and Weight for length (W/L) z-scores at birth.