

Tables

Table 1. Maternal and infant characteristics and their association with maternal cortisol levels (n=230)

Variables	Categories	Low cortisol level ($\leq 17.66 \mu\text{g/L}$)	Higher Cortisol level ($> 17.66 \mu\text{g/L}$)	p-value
Maternal age (Years)	Continuous			0.012
Maternal age(Yrs)	18-25(Ref)	11 (4.8)	07 (3)	
	26-30	36 (15.7)	25 (10.9)	0.221
	>30	69 (30)	82 (35.7)	0.08
Gravida	1(Ref)	36(15.7)	49(21.3)	
	2	50(21.7)	46(20)	0.037
	≥ 3	30(13)	19(8.3)	0.296
Parity	Nullipara (Ref)	41 (17.8)	55 (23.9)	
	Primi	62 (27)	52 (22.6)	0.075
	Multi	13 (5.7)	07 (3)	0.38
BMI	Normal(18.5-22.9)(Ref)	36 (15.7)	41 (17.8)	
	Underweight (<18.5)	05 (2.2)	09 (3.9)	0.223
	Overweight (23-24.9)	19 (8.3)	20 (8.7)	0.162
	Obese (≥ 25)	56 (24.3)	44 (19.1)	0.44
	No(Ref)	70 (31.3)	70 (31.3)	

Husband smokes cigarette	Yes	41 (18.3)	43 (19.2)	0.863
Spousal alcohol habit	No(Ref)	91(40.6)	100(44.6)	
	Yes	20(8.9)	13(5.8)	0.172
History of abortion	No(Ref)	90(39.1)	95(41.3)	
	Yes	26(11.3)	19(8.3)	0.273
GDM	No(Ref)	90(39.1)	96(41.7)	
	Yes	26(11.3)	18(7.8)	0.203
HYP	No	106(46.1)	108(47)	
	Yes	10(4.3)	6(2.6)	0.322
Respondent's sum of skin fold	<90 th percentile (Ref)	107(46.5)	100(43.5)	
	≥90 th percentile	9(3.9)	14(6.1)	0.257
Depressive symptoms	No (0-12)(Ref)	97 (42.2)	91 (39.6)	
	Yes (≥13)	19 (8.3)	23 (10)	0.457
Social support	≥24(Ref)	55(23.9)	53 (23)	
	<24	61(26.5)	61(26.5)	0.889
GA at delivery	<37weeks	109 (47.4)	106 (46.1)	0.763
	≥37weeks(Ref)	07 (3)	08 (3.5)	
Infant gender	Female(Ref)	47(20.4)	66 (28.7)	
	Male	69 (30)	48 (20.9)	0.008
Low birth weight (<2.5kg)	No(Ref)	76 (33)	88 (38.3)	
	Yes	40 (17.4)	26 (11.3)	0.05

SGA	No(Ref)	63 (27.5)	63 (27.5)	
	Yes	53 (23.1)	50 (21.8)	0.826
WHZ (<10th percentile)	No(Ref)	86 (37.6)	96 (41.9)	
	Yes	30 (13.1)	17 (7.4)	0.043
HC (<10th percentile)	No(Ref)	102 (44.5)	103 (45)	
	Yes	14 (6.1)	10 (4.4)	0.426
SSF (<10th percentile)	No(Ref)	103(44.8)	104(45.2)	
	Yes	13(5.7)	10(4.3)	0.539

GA-gestational age, BMI-Body mass index, GDM- pregnancy gestational diabetes mellitus, HYP-pregnancy hypertension, SGA-Small for gestational age, WHZ-weight for height/length z-score, HC-head circumference

Table 2. Regression results on the association between maternal cortisol level and birth weight, small for gestational age (SGA), length for gestational weight, and head circumference for gestational age, n=230

Exposure variable	Birth weight (β /OR (95% CI))		SGA (β /OR (95% CI))		Lower WHZ score (β /OR (95% CI))		Lower skinfold thickness (β /OR (95% CI))		Lower HC score (β /OR (95% CI))		Lower CRL (β /OR (95% CI))	
	Univariate	Adjusted	Univariate	Adjusted	Univariate	Adjusted	Univariate	Adjusted	Univariate	Adjusted	Univariate	Adjusted
Cortisol	0.012	0.015	-.010	-.010	0.006	0.009	-0.014	-0.009	0.12	0.006	0.006	0.031
(continuous)	(-0.02, 0.04)	(-.01, 0.01)	(-.02, .00)	(-.02, .00)	(-0.03, 0.04)	(-.05,0.03)	(-.09, 0.06)	(-.09, 0.07)	(-0.02, 0.05)	(-0.03, 0.04)	(-.08, 0.09)	(-.06,0.12)
Cortisol (trichotomous)												
Low= Ref												
Moderate	1.138 (0.42, 3.04)	1.028 (0.37, 2.85)	1.575 (0.63, 3.89)	1.488 (0.58,3.75)	NA	NA	1.273 (0.27, 5.83)	1.103 (0.22,5.38)	4.026 (0.91,17.79)	3.659 (0.79,16.87)	2.226 (0.28,17.55)	1.748 (0.20,14.68)
High	1.322 (0.36, 4.81)	1.483 (0.38, 5.73)	1.875 (0.56, 6.21)	1.954 (0.56,6.75)	NA	NA	0.500 (0.04, 5.94)	0.463 (0.03,6.17)	3.937 (0.70,22.15)	3.514 (0.58,21.02)	3.474 (0.33,36.24)	3.861 (0.32,45.43)
Cortisol (mean cut-off), Low (≤ 17.66)= Ref												
High ($>17.66\mu\text{g/L}$)	1.781* (0.99, 3.18)	2.289* (1.21, 4.32)	1.060 (0.63, 1.78)	1.099 (0.63,1.89)	1.970* (1.01, 3.82)	2.165* (1.07,4.35)	1.313 (0.55, 3.12)	1.368 (0.54,3.54)	1.213 (0.67, 2.19)	1.266 (0.66, 2.40)	2.098 (0.81, 5.40)	2.298 (0.81, 6.46)

β - Coefficient, OR-odds ratio. The adjusted covariates are Gestational age, gender, maternal age, parity, BMI, and gestational age at delivery. (*denotes p-value <0.05)

Table 3. Logistic regression analysis for elevated cortisol during pregnancy and postpartum depression.

	Postpartum depressive symptoms (n=230)	
Exposure variable	Unadjusted (β estimate/Odds ratio & CI)	Adjusted (β estimate/Odds ratio & CI)
Cortisol (continuous)	-0.187(-0.53,0.16)	-0.236(-0.59,0.12)
Cortisol (trichotomous) (Cortisol <25 th percentile=Ref)		
Medium (25-75 th percentile)	0.794 (0.31,2.01)	0.682(0.22,2.09)
High(>75 th percentile)	1.143(0.32,4.08)	1.369(0.30,6.20)
Cortisol (mean cut off) Low (≤ 17.66) = Ref		
High (>17.66ug/L)	1.530(0.88,2.63)	2.339*(1.17,4.64)

*denotes p-value is <0.05

Model is adjusted for age, socioeconomic status, maternal education, gravida, H/o abortion, BMI, gestational diabetes, hypertension, depressive symptoms during pregnancy, social support, gestational age at delivery, type of delivery and the gender of the child.