

Additional Table 3 Prevalence and adjusted odds ratios of maternal and perinatal mortality and morbidity by birthweight in singleton term infants excluding pre-labor cesarean deliveries

Birthweight (g)	Maternal mortality and morbidity		Perinatal mortality and morbidity	
	Prevalence (%)	Adjusted OR (95% CI) ^a	Prevalence (%)	Adjusted OR (95% CI) ^a
	Africa N=63325			
3000–3499	4.4	1.00	4.3	1.00
3500–3999	5.4	1.44 (1.02, 1.26)	3.9	0.93 (0.83, 1.04)
4000–4099	7.5	1.53 (1.25, 1.88)	3.7	0.97 (0.75, 1.26)
4100–4199	7.3	1.41 (0.99, 2.01)	3.3	0.96 (0.60, 1.53)
4200–4299	7.5	1.46 (1.04, 2.04)	2.9	0.80 (0.49, 1.30)
4300–4399	9.1	1.45 (0.95, 2.22)	4.4	1.22 (0.71, 2.10)
4400–4499	10.9	2.07 (1.24, 3.47)	3.5	1.29 (0.60, 2.80)
4500–4999	9.8	1.50 (1.08, 2.07)	5.0	1.35 (0.90, 2.03)
≥5000	16.2	3.20 (1.82, 5.60)	17.1	5.12 (3.01, 8.72)
Asia	N=77399			
3000–3499	4.7	1.00	1.6	1.00
3500–3999	5.6	1.38 (1.24, 1.55)	1.4	1.05 (0.87, 1.26)
4000–4099	6.2	2.04 (1.42, 2.92)	1.9	1.42 (0.81, 2.50)
4100–4199	8.0	2.32 (1.47, 3.68)	1.2	1.03 (0.38, 2.81)
4200–4299	5.6	2.46 (1.29, 4.69)	3.3	2.49 (1.45, 5.38)
4300–4399	12.9	4.80 (2.61, 8.81)	4.8	3.61 (1.54, 8.46)
4400–4499	9.5	4.32 (1.65, 11.35)	6.3	5.24 (1.83, 14.97)
4500–4999	11.9	3.47 (1.81, 6.62)	7.6	5.38 (2.64, 10.95)
≥5000	22.9	7.97 (3.07, 20.71)	28.6	32.41 (14.53, 70.96)
Latin America	N=67782			
3000–3499	2.2	1.00	1.9	1.00
3500–3999	2.3	1.42 (0.98, 1.28)	2.0	0.96 (0.83, 1.10)
4000–4099	2.8	1.49 (1.04, 2.13)	2.1	1.03 (0.69, 1.55)
4100–4199	1.9	0.98 (0.57, 1.68)	1.8	0.83 (0.48, 1.46)
4200–4299	2.2	0.98 (0.53, 1.82)	2.9	1.36 (0.82, 2.27)
4300–4399	2.9	1.42 (0.74, 2.70)	2.3	1.03 (0.51, 2.11)
4400–4499	2.6	1.21 (0.48, 3.03)	2.6	1.17 (0.47, 2.88)
4500–4999	3.5	1.70 (0.93, 3.10)	3.2	1.44 (0.78, 2.66)
≥5000	3.0	1.09 (0.13, 9.03)	15.2	7.22 (2.71, 19.26)

a: All estimates were based on two-level logistic regression models. Facilities represent units at level two and individuals within facilities are observations at level one. We adjusted for country, maternal age, marital status, education (total years of school attendance), obesity, diabetes, parity, infant sex, and gestational age.

Additional Table 4 Prevalence and adjusted odds ratios of maternal and perinatal mortality and morbidity by birthweight in singleton term infants born through vaginal deliveries

Birthweight (g)	Maternal mortality and morbidity		Perinatal mortality and morbidity	
	Prevalence (%)	Adjusted OR (95% CI) ^a	Prevalence (%)	Adjusted OR (95% CI) ^a
	Africa N= 59453			
3000–3499	3.3	1.00	3.8	1.00
3500–3999	4.0	1.10 (0.97, 1.25)	3.3	0.90 (0.79, 1.01)
4000–4099	5.8	1.44 (1.12, 1.86)	2.9	0.82 (0.61, 1.12)
4100–4199	4.7	1.19 (0.75, 1.89)	2.5	0.81 (0.47, 1.42)
4200–4299	4.6	1.25 (0.78, 2.00)	2.2	0.71 (0.39, 1.29)
4300–4399	5.6	0.99 (0.55, 1.77)	4.0	1.25 (0.69, 2.30)
4400–4499	8.3	2.19 (1.15, 4.16)	2.8	1.14 (0.46, 2.84)
4500–4999	6.7	1.21 (0.79, 1.85)	4.0	1.23 (0.75, 2.01)
≥5000	11.5	2.39 (1.15, 4.96)	16.7	5.49 (3.06, 9.86)
Asia	N= 65956			
3000–3499	3.3	1.00	1.5	1.00
3500–3999	3.3	1.25 (1.04, 1.49)	1.3	0.94 (0.75, 1.17)
4000–4099	2.2	1.42 (0.69, 2.93)	1.8	1.35 (0.66, 2.77)
4100–4199	1.9	0.66 (0.18, 2.45)	1.9	1.78 (0.65, 4.88)
4200–4299	3.3	2.56 (0.90, 7.24)	2.4	1.76 (0.55, 5.65)
4300–4399	1.4	0.88 (0.11, 7.10)	5.8	4.77 (1.66, 13.73)
4400–4499	3.0	4.42 (0.54, 31.68)	3.0	2.24 (0.29, 17.04)
4500–4999	6.9	3.77 (1.13, 12.61)	6.9	4.51 (1.58, 12.90)
≥5000	22.2	4.72 (1.27, 17.52)	38.9	70.37 (24.41, 202.9)
Latin America	N= 57778			
3000–3499	2.2	1.00	1.8	1.00
3500–3999	2.3	1.12 (0.97, 1.29)	1.7	0.92 (0.78, 1.08)
4000–4099	2.6	1.41 (0.92, 2.16)	1.7	0.96 (0.58, 1.59)
4100–4199	2.2	1.14 (0.63, 2.06)	1.6	0.92 (0.47, 1.79)
4200–4299	2.1	0.93 (0.43, 1.99)	2.3	1.22 (0.62, 2.40)
4300–4399	2.6	1.29 (0.56, 2.95)	2.1	1.06 (0.43, 2.61)
4400–4499	3.7	1.75 (0.68, 4.5)	3.0	1.48 (0.54, 4.08)
4500–4999	2.9	1.38 (0.59, 3.19)	4.3	2.34 (1.17, 4.65)
≥5000	4.5	2.41 (0.25, 17.97)	18.2	10.30 (3.35, 31.68)

a: All estimates were based on two-level logistic regression models. Facilities represent units at level two and individuals within facilities are observations at level one. We adjusted for country, maternal age, marital status, education (total years of school attendance), obesity, diabetes, parity, infant sex, and gestational age.

Additional Table 5 Prevalence and adjusted odds ratios of maternal and perinatal mortality and morbidity by birthweight in singleton term infants in countries with less than 10% of missing value for BMI

Birthweight	Maternal mortality and morbidity		Perinatal mortality and morbidity	
	Prevalence (%)	Adjusted OR (95% CI) ^a	Prevalence (%)	Adjusted OR (95% CI) ^a
Africa	N=36325			
3000–3499	9.6	1.00	3.5	1.00
3500–3999	10.8	1.40 (1.00, 1.21)	2.7	0.83 (0.70, 0.98)
4000–4099	13.9	1.47 (1.21, 1.79)	3.4	0.84 (0.59, 1.19)
4100–4199	13.7	1.44 (1.07, 1.94)	2.4	0.82 (0.44, 1.54)
4200–4299	15.5	1.66 (1.26, 2.19)	3.1	0.95 (0.55, 1.63)
4300–4399	18.6	1.62 (1.14, 2.29)	1.9	0.59 (0.23, 1.47)
4400–4499	20.6	2.34 (1.54, 3.56)	2.4	0.89 (0.32, 2.44)
4500–4999	18.7	1.81 (1.39, 2.35)	3.6	1.00 (0.59, 1.68)
≥5000	25.6	3.42 (2.14, 5.47)	12.4	3.26 (1.82, 5.86)
Asia	N=91595			
3000–3499	4.7	1.00	1.7	1.00
3500–3999	5.4	1.38 (1.24, 1.52)	1.6	1.05 (0.9, 1.24)
4000–4099	5.4	1.86 (1.35, 2.56)	2.1	1.49 (0.94, 2.35)
4100–4199	6.7	2.25 (1.50, 3.38)	1.2	1.01 (0.45, 2.29)
4200–4299	5.0	2.03 (1.47, 3.52)	4.1	2.80 (1.58, 4.99)
4300–4399	11.5	4.42 (2.60, 7.50)	3.3	2.44 (1.06, 5.64)
4400–4499	7.9	3.81 (1.68, 8.60)	4.0	2.99 (1.07, 8.34)
4500–4999	10.0	3.38 (1.99, 5.74)	6.0	4.42 (2.24, 7.56)
≥5000	17.3	7.51 (3.25, 17.33)	26.9	28.44 (14.81, 54.61)
Latin America	N=49909			
America				
3000–3499	3.0	1.00	1.5	1.00
3500–3999	3.4	1.05 (0.92, 1.20)	1.4	0.97 (0.80, 1.18)
4000–4099	3.3	1.47 (0.79, 1.72)	1.7	1.49 (0.70, 2.02)
4100–4199	2.3	0.82 (0.44, 1.52)	1.5	1.41 (0.52, 2.37)
4200–4299	3.4	1.44 (0.64, 2.02)	2.6	1.89 (0.99, 3.59)
4300–4399	3.4	1.26 (0.61, 2.60)	0.9	0.68 (0.47, 2.75)
4400–4499	3.4	1.41 (0.44, 2.79)	2.8	2.01 (0.73, 5.53)
4500–4999	5.0	1.67 (0.97, 2.88)	4.3	3.45 (1.76, 5.64)
≥5000	12.0	3.82 (1.04, 14.06)	12.0	8.93 (2.60, 30.67)

a: All estimates are based on two-level logistic regression models. Facilities represent units at level two and individuals within facilities are observations at level one. We adjusted for country, maternal age, marital status, education (total years of school attendance), obesity, diabetes, parity, infant sex and gestational age.

Additional Table 6 Prevalence and adjusted odds ratios of maternal and perinatal mortality and morbidity by birthweight centile in singleton term infants in countries with less than 10% of missing value for BMI

Birthweight centile	Maternal mortality and morbidity		Perinatal mortality and morbidity	
	Prevalence (%)	Adjusted OR (95% CI) ^{a,c}	Prevalence (%)	Adjusted OR (95% CI) ^{a,c}
Africa	N=36325			
P ₅₀ –P ₇₄	9·5	1·00	3·4	1·00
P ₇₅ –P ₈₉	10·5	1·24 (1·10, 1·40)	2·6	0·85 (0·69, 1·06)
P ₉₀ –P ₉₄	9·6	1·10 (0·93, 1·29)	4·1	1·08 (0·85, 1·38)
P ₉₅ –P ₉₆	10·9	1·46 (1·15, 1·86)	4·1	1·15 (0·80, 1·66)
≥P ₉₇	13·0	1·70 (1·48, 1·96)	4·4	1·07 (0·85, 1·33)
Asia	N=91595			
P ₅₀ –P ₇₄	5·0	1·00	1·8	1·00
P ₇₅ –P ₈₉	5·1	1·03 (0·92, 1·15)	2·0	1·02 (0·86, 1·19)
P ₉₀ –P ₉₄	4·8	1·04 (0·89, 1·21)	1·7	0·88 (0·70, 1·11)
P ₉₅ –P ₉₆	5·1	1·20 (0·98, 1·46)	2·4	1·08 (0·83, 1·41)
≥P ₉₇	6·4	1·41 (1·25, 1·59)	2·5	1·12 (0·94, 1·34)
Latin America	N=49909			
P ₅₀ –P ₇₄	3·0	1·00	1·3	1·00
P ₇₅ –P ₈₉	3·1	1·06 (0·89, 1·26)	1·5	1·11 (0·86, 1·42)
P ₉₀ –P ₉₄	3·0	1·04 (0·82, 1·32)	1·4	0·82 (0·56, 1·19)
P ₉₅ –P ₉₆	3·1	1·09 (0·78, 1·51)	1·8	1·23 (0·79, 1·90)
≥P ₉₇	3·3	1·15 (0·93, 1·43)	2·2	1·49 (1·14, 1·96)

a: All estimates are based on two-level logistic regression models. Facilities represent units at level two and individuals within facilities are observations at level one. We adjusted for country, maternal age, marital status, education (total years of school attendance), obesity, diabetes, parity, infant sex, and gestational age.

Additional Table 7 Prevalence and adjusted odds ratios of maternal and perinatal mortality and morbidity by birthweight with exclusion of obesity and diabetes from the regression models in singleton term infants

Birthweight	Maternal mortality and morbidity		Perinatal mortality and morbidity	
	Prevalence (%)	Adjusted OR (95% CI) ^a	Prevalence (%)	Adjusted OR (95% CI) ^a
Africa	N=67546			
3000–3499	6.0	1.00	4.6	1.00
3500–3999	7.2	1.40 (1.01, 1.20)	4.2	0.95 (0.85, 1.05)
4000–4099	9.2	1.45 (1.22, 1.73)	4.0	0.98 (0.77, 1.24)
4100–4199	10.6	1.51 (1.14, 1.99)	3.4	0.93 (0.60, 1.44)
4200–4299	11.7	1.62 (1.25, 2.41)	3.4	0.87 (0.56, 1.34)
4300–4399	14.3	1.74 (1.26, 2.42)	5.0	1.32 (0.81, 2.14)
4400–4499	15.5	2.32 (1.55, 3.48)	3.8	1.26 (0.64, 2.51)
4500–4999	15.0	1.89 (1.47, 2.42)	5.4	1.38 (0.95, 1.99)
≥5000	21.2	3.27 (2.08, 5.12)	14.4	4.06 (2.44, 6.73)
Asia	N=91595			
3000–3499	4.7	1.00	1.7	1.00
3500–3999	5.4	1.38 (1.25, 1.53)	1.6	1.07 (0.91, 1.26)
4000–4099	5.4	1.87 (1.36, 2.58)	2.1	1.55 (0.98, 2.44)
4100–4199	6.7	2.26 (1.51, 3.40)	1.2	1.07 (0.47, 2.42)
4200–4299	5.0	2.05 (1.48, 3.56)	4.1	3.06 (1.72, 5.42)
4300–4399	11.5	4.46 (2.63, 7.57)	3.3	2.61 (1.13, 6.03)
4400–4499	7.9	3.86 (1.71, 8.70)	4.0	3.43 (1.24, 9.49)
4500–4999	10.0	3.45 (2.04, 5.85)	6.0	4.52 (2.47, 8.28)
≥5000	17.3	7.52 (3.25, 17.39)	27.0	31.51 (16.52, 60.12)
Latin America	N=87518			
America				
3000–3499	2.4	1.00	2.4	1.00
3500–3999	2.6	1.44 (1.02, 1.28)	2.0	0.95 (0.84, 1.07)
4000–4099	3.0	1.44 (1.07, 1.93)	2.3	1.08 (0.78, 1.51)
4100–4199	2.7	1.27 (0.86, 1.89)	2.2	0.99 (0.64, 1.52)
4200–4299	2.5	1.41 (0.69, 1.77)	2.8	1.27 (0.81, 1.98)
4300–4399	3.0	1.33 (0.77, 2.30)	2.2	0.94 (0.50, 1.78)
4400–4499	2.9	1.49 (0.57, 2.45)	2.9	1.27 (0.62, 2.59)
4500–4999	3.5	1.55 (0.98, 2.47)	4.0	1.88 (1.22, 2.89)
≥5000	5.5	2.39 (0.70, 8.13)	16.4	8.07 (3.84, 16.95)

a: Data are adjusted odds ratio (95% CI). All estimates are based on two-level logistic regression models. Facilities represent units at level two and individuals within facilities are observations at level one. We adjusted for country, maternal age, marital status, education (total years of school attendance, ref ≥ 13 years), parity, infant sex, and gestational age.

Additional Table 8 Prevalence and adjusted odds ratios of maternal and perinatal mortality and morbidity by birthweight centile with exclusion of obesity and diabetes from the regression models in singleton term infants

Birthweight centile	Maternal mortality and morbidity		Perinatal mortality and morbidity	
	Prevalence (%)	Adjusted OR (95% CI) ^a	Prevalence (%)	Adjusted OR (95% CI) ^a
Africa N=67546				
P ₅₀ –P ₇₄	6.3	1.00	4.3	1.00
P ₇₅ –P ₈₉	6.6	1.18 (1.05, 1.31)	4.3	0.98 (0.86, 1.12)
P ₉₀ –P ₉₄	5.7	1.09 (0.95, 1.26)	5.0	1.08 (0.92, 1.26)
P ₉₅ –P ₉₆	6.6	1.31 (1.06, 1.62)	5.4	1.14 (0.91, 1.44)
≥P ₉₇	7.2	1.57 (1.39, 1.78)	5.8	1.11 (0.97, 1.27)
Asia N=91595				
P ₅₀ –P ₇₄	5.0	1.00	1.8	1.00
P ₇₅ –P ₈₉	5.1	1.03 (0.92, 1.15)	2.0	1.02 (0.87, 1.20)
P ₉₀ –P ₉₄	4.8	1.04 (0.89, 1.21)	1.7	0.89 (0.71, 1.12)
P ₉₅ –P ₉₆	5.1	1.20 (0.99, 1.46)	2.4	1.10 (0.84, 1.42)
≥P ₉₇	6.4	1.42 (1.26, 1.61)	2.5	1.16 (0.97, 1.38)
Latin America N=87518				
P ₅₀ –P ₇₄	2.4	1.00	2.0	1.00
P ₇₅ –P ₈₉	2.7	1.13 (0.98, 1.31)	2.2	1.08 (0.93, 1.27)
P ₉₀ –P ₉₄	2.6	1.06 (0.87, 1.29)	1.8	0.88 (0.70, 1.11)
P ₉₅ –P ₉₆	2.9	1.21 (0.92, 1.58)	2.1	0.97 (0.71, 1.33)
≥P ₉₇	3.0	1.24 (1.04, 1.48)	2.8	1.33 (1.11, 1.60)

a: Data are adjusted odds ratio (95% CI). All estimates are based on two-level logistic regression models. Facilities represent units at level two and individuals within facilities are observations at level one. We adjusted for country, maternal age, marital status, education (total years of school attendance, ref ≥ 13 years), parity, infant sex, and gestational age.