

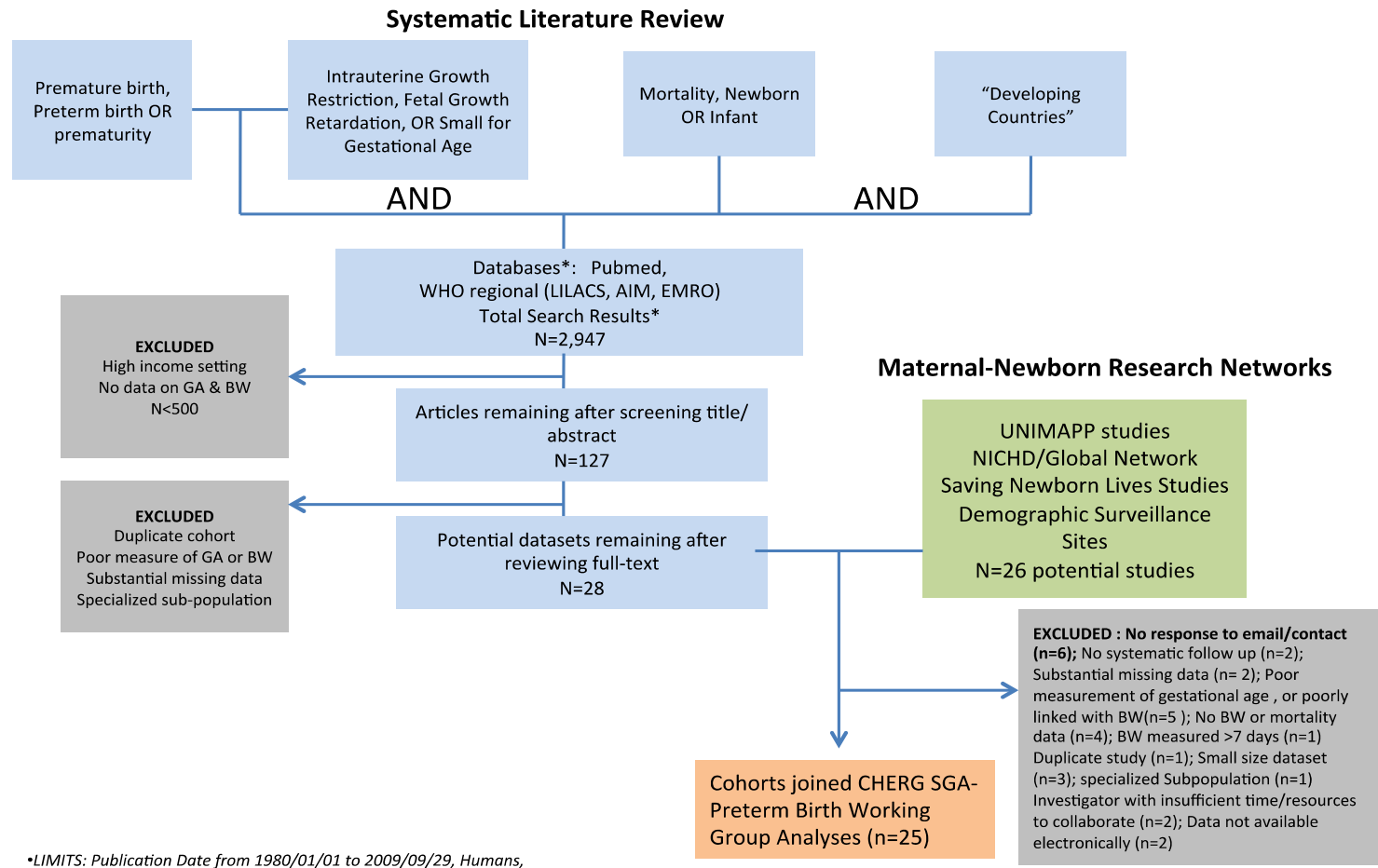
THE LANCET Global Health

Supplementary appendix

This appendix formed part of the original submission and has been peer reviewed. We post it as supplied by the authors.

Supplement to: Lee ACC, Katz J, Blencowe H, et al. National and regional estimates of term and preterm babies born small for gestational age in 138 low-income and middle-income countries in 2010. *Lancet Glob Health* 2013; **1**: e26–36.

Web appendix 1: Identification of Child Health Epidemiology Reference Group (CHERG) Small for Gestational Age-Preterm Birth Cohorts



Web appendix 2. Study Characteristics of Included CHERG Cohorts

Study name	Setting	Primary study design	Population represented	N (original cohort)	N (analyzed cohort)	NMR (per 1000 live births)	% LBW	% preterm	% SGA	% facility delivery	Method of gestational age assessment
Bangladesh (2001) ¹	Rural Gaibandha and Rangpur, BANGLADESH	Cluster RCT of maternal Vitamin A supplementation	Population based recruitment of all pregnant women in study area	18,250	12,984	51	54	22	71	15	LMP
Bangladesh (2005) ²	Rural Sylhet, BANGLADESH	Cluster RCT of community sepsis treatment	Population based recruitment of all pregnant women in study area	10,585	6,504	31	30	19	50	6	LMP
India (2000) ³	Rural Tamil Nadu, INDIA	RCT of newborn Vitamin A supplementation	Population based recruitment of all pregnant women in study area	12,936	9,506	38	33	14	62	63	LMP
Nepal (1999) ⁴	Rural Sarlahi, NEPAL	Cluster RCT of multiple micronutrient supplementation	Population based recruitment of all pregnant women in study area	4,130	3,319	42	39	22	56	6	LMP
Nepal (2003) ⁵	Peri-Urban Dhanusha, NEPAL	RCT of antenatal micronutrient supplementation	Antenatal clinic-based recruitment of pregnant women in study area	1,106	1,052	25	22	7	53	53	Ultrasound
Nepal (2004) ⁶	Rural Sarlahi, NEPAL	Cluster RCT of newborn skin-umbilical cord cleansing with chlorhexidine	Population based recruitment of all pregnant women in study area	23,662	21,792	32	30	18	52	10	LMP
Pakistan (2003) ⁷	Rural Sindh, PAKISTAN	Cluster RCT of maternal micronutrient supplementation	Population based recruitment of all pregnant women in study villages	1,548	1,434	18	19	28	28	100	Ultrasound
Pakistan (2000) (Bhutta, personal communication)	Urban Karachi, PAKISTAN	Prospective birth cohort of inborn children	Tertiary Care Teaching Hospital, Aga Khan	27,838	27,681	NA	12	12	22	100	LMP, early ultrasound on 75% of births

Web appendix 2. Study Characteristics of Included CHERG Cohorts (continued)

Study Name	Setting	Primary Study design	Population represented	N (original cohort)	N (analyzed cohort)	NMR	% LBW	% preterm	% SGA	% facility delivery	Method of gestational age assessment
Philippines (1983) ⁸	Urban Cebu, PHILLIPINES	Longitudinal Health-nutritional survey of infant feeding patterns	Population-based, random cluster sample of census	3,080	2,785	14	11	18	25	34	LMP, Ballard to confirm
Thailand (2001) ⁹	Urban Bangkok, THAILAND	Prospective follow-up of birth cohort	Longitudinal birth cohort of all births in 4 districts	4,245	3,860	5	8	9	22	99	Best obstetric estimate (LMP, ultrasound or neonatal)
Burkina Faso (2004) ¹⁰	Rural Hounde, BURKINA FASO	RCT of multiple micronutrient supplementation	Prospective, community-based cohort	1,373	1,060	21	17	16	35	77	Ultrasound at recruitment
Burkina Faso (2006) ¹¹	Rural Hounde, BURKINA FASO	RCT of maternal fortified food supplementation	Prospective, community-based cohort	1,316	1,067	20	16	18	29	84	Ultrasound at recruitment
Kenya (1992) ¹²	Rural Assembo, KENYA	Clinical Malaria Trial	Community-based, recruitment by census / traditional birth attendants	1828	1,471	60	10	3	27	9	LMP, Ballard
South Africa (2001) ¹³	Rural Umkhanyakude, KwaZulu-Natal, SOUTH AFRICA	Non-randomized cohort intervention study of exclusive breastfeeding-HIV vertical transmission	Facility-based recruitment, 8 ANC clinics	2811	2461	31	10	22	18	58	LMP, adjusted by clinical assessment
Tanzania (2001) ¹⁴	Urban Dar es Salaam, TANZANIA	RCT of multi-vitamin supplementation	Facility-based, ANC clinics	7,752	7,557	28	8	17	20	97	LMP
Tanzania (2008) ¹⁵	Rural Korogwe, TANZANIA	Observational malaria study	Facility-based recruitment, ANC clinics, community follow-up	915	777	33	11	5	22	88	Ultrasound
Uganda (2005) ¹⁶	Rural Kabale district, UGANDA	RCT Intermittent preventive malaria therapy and insecticide nets	Facility-based recruitment ANC clinics; only include facility births	1,561	1,477	17	7	6	10	100	Ballard external

Web appendix 2. Study Characteristics of Included CHERG Cohorts (continued)

Study Name	Setting	Primary Study design	Population represented	N (original cohort)	N (analyzed cohort)	NMR	% LBW	% preterm	% SGA	% facility delivery	Method of gestational age assessment
Brazil (1982) ¹⁷	Urban Pelotas city, Rio Grande do Sul, Southern BRAZIL	Longitudinal Birth Cohort Survey	Population-based, all births in Pelotas hospitals (100% facility delivery)	5,914	4,670	11	7	6	17	100	LMP
Brazil (1993) ¹⁸	Urban Pelotas city, Rio Grande do Sul, Southern BRAZIL	Longitudinal Birth Cohort Survey	Population-based, all births in Pelotas hospitals (100% facility delivery)	5,279	4,632	7	9	11	19	100	LMP and Dubowitz
Brazil (2004) ¹⁹	Urban Pelotas city, Rio Grande do Sul, Southern BRAZIL	Longitudinal Birth Cohort Survey	Population-based, all births in Pelotas hospitals (100% facility delivery)	4,287	3,837	10	11	16	15	100	LMP, ultrasound if available, Dubowitz
Chile (2000) ²⁰	CHILE	Birth registry	Population-based	1,901,611	1,898,250	5	6	7	7	98	Best obstetric estimate (LMP corrected by ultrasound before 20 wks)
Peru (1995) ²¹	Urban shantytown, Lima, PERU	RCT of maternal zinc supplementation	Facility-based	978	966	0	4	5	11	100	LMP, clinical indications, ultrasound if available

NMR = neonatal mortality rate, neonatal deaths per 1000 live births, SGA = small for gestational age, LBW = low birthweight, RCT = randomized control trial, ANC = antenatal care, LMP = Last menstrual period

Web Appendix 3: Identification of published literature reporting Small for Gestational Age (Alexander reference²²) and Low Birthweight prevalence

Search 1: Medline search

(prevalence OR incidence) AND ("low birth weight" OR "low birthweight" OR lbw) AND ("Infant, Small for Gestational Age"[Mesh] OR "Fetal Growth Retardation"[Mesh] OR "small for gestational age"[All Fields] OR "small-for-gestational-age"[All Fields] OR "SGA"[All Fields] OR "intrauterine growth retardation"[All Fields] OR "intrauterine growth restriction"[All Fields] OR "IUGR"[All Fields] OR "small for age"[All Fields] OR "small-for-age"[All Fields]) AND ("developing countries" OR "low-income countries" OR ("Developing Countries"[Mesh] OR "developing country"[All Fields] OR "developing countries"[All Fields] OR "developing nation"[All Fields] OR "developing nations"[All Fields] OR "under-developed country"[All Fields] OR "under-developed countries"[All Fields] OR "under developed country"[All Fields] OR "under developed countries"[All Fields] OR "under-developed nations"[All Fields] OR "under developed nations"[All Fields] OR "third world country"[All Fields] OR "third world countries"[All Fields] OR "third world nation"[All Fields] OR "third world nations"[All Fields] OR "less developed country"[All Fields] OR "less developed countries"[All Fields] OR "less-developed country"[All Fields] OR "less-developed countries"[All Fields] OR "less developed nations"[All Fields] OR "less-developed nations"[All Fields] OR "Low Resource Setting"[All Fields] OR "Low Resource Settings"[All Fields] OR [*extended individual country list available upon request*]) **[352 studies]**

Search 2: Scopus search identifying all published articles that have cited the Alexander reference small-for-gestational-age publication²²

760 studies

Final total for publications reporting LBW and SGA prevalence using Alexander reference: six²³⁻²⁸

Web appendix 4. Description of the WHO Global Survey²⁹ facility-based data points included

Country	Study year	N	% LBW	% Preterm	% SGA	NMR ¹	%Facility delivery ²
Algeria	2004	10,952	6.1%	5.8%	11.2%	20.3	95
Angola	2004	1,809	6.9%	5.7%	20.3%	46.6	46
Argentina	2004	9,528	8.6%	9.6%	10.9%	9.6	99
Brazil	2004	11,795	10.0%	8.8%	17.4%	15.3	98
Cambodia	2007	5,187	8.6%	7.0%	26.8%	28.3	22
China	2007	8,967	5.4%	6.7%	10.4%	14.2	92
Cuba	2004	10,360	5.9%	5.3%	14.1%	3.5	100
DR Congo	2004	3,399	14.0%	13.8%	22.9%	48.9	70
Ecuador	2004	9,137	12.1%	8.3%	26.0%	12.6	74
India	2007	16,821	25.1%	14.8%	50.1%	35.2	39
Kenya	2004	15,375	9.1%	11.9%	19.9%	30.5	39
Mexico	2004	18,572	8.6%	8.5%	18.2%	9.8	86
Nepal	2007	7,835	12.6%	9.4%	34.9%	30.9	18
Nicaragua	2004	5,066	8.5%	7.3%	18.5%	16	74
Niger	2004	754	10.7%	7.6%	29.3%	38.1	17
Nigeria	2004	1,956	8.3%	10.2%	20.9%	42.6	35
Paraguay	2004	2,682	7.4%	10.3%	10.0%	16.1	85
Peru	2004	13,193	8.5%	9.7%	10.5%	11.6	72
Phillippines	2007	10,915	16.2%	8.7%	34.8%	13.7	44
Sri Lanka	2007	14,276	14.4%	7.3%	33.2%	8.9	98
Thailand	2007	9,098	10.2%	11.2%	17.3%	8.6	97
Uganda	2004	12,095	6.4%	8.4%	12.9%	32.4	41
Vietnam	2007	7,573	5.7%	4.5%	17.5%	13.6	64

LBW = low birthweight, SGA = small for gestational age, NMR = neonatal mortality rate, neonatal deaths per 1000 live births

1 Neonatal mortality rates were not available for study data points, thus national NMRs were used from the UN-IGME for the year of the initial year of the survey³⁰.

2 Facility delivery rates not available for study area and thus national delivery care coverage (institutional delivery) from 2003-2008 were taken from UNICEF State of the Children's Report 2010.³¹

Web appendix 5. Formula for random-effects regression

$$\text{logit}(\text{PrTSGA}_{ijt}) = \alpha + \beta \ln(\text{PrLBW}_{ijt}) + \sum \gamma X_i + \sum \lambda Y_{it} + \eta_j + \varepsilon_{jt}$$

PrTSGA=prevalence of term small-for-gestational-age babies

PrLBW=prevalence of low-birthweight babies

i=source

j=region

t=study year

$\alpha, \beta, \gamma, \lambda$ =coefficients of parameters to be estimated

X=set of dummy variables for population selection/bias

Y=set of predictor variables representing socioeconomic factors and health care use for source (i) and year (t)

η =random region effect, assumed to be normally distributed

ε =normally distributed error term

Web appendix 6: Comparison of Final Models for logit(term-SGA prevalence)

In the cross validation, the study data were randomly divided into five subsamples. One subsample was withheld while modeling was conducted on the remaining 80% of the data. This was repeated with each successive subsample withheld, and a summary measure of the prediction error was generated for the entire dataset. The standardized error term was calculated as $(\text{observed} - \text{predicted})^2 / \text{variance}$. The final model selected was that which had the lowest prediction error based on the standardized error term.

Model	Dependent Variable	Covariates	Adj R-squared	Out of Model Prediction error ¹
1	Logit TSGA	lnLBW, population recruitment	0.7966	73,608
2	Logit TSGA	lnLBW, population recruitment, NMR	0.8237	70,836

TSGA = Term-Small for gestational age, LBW = low birthweight, NMR = neonatal mortality rate, neonatal deaths per 1000 live births

¹ Sum of $(\text{observed} - \text{predicted})^2 / \text{variance}$ for each study dataset with out of prediction modeling excluding 20% of studies x 5

Web appendix 7.

Prevalence of Small-for-Gestational-Age Comparing Datasets with versus without Imputation of Missing

Birth weights

Imputation Methods and Results

Two imputation strategies were developed to impute weights that were either: 1) completely missing, or 2) measured after the time of birth in community datasets. For weights measured from birth up to 10 days of life that had information on the hour of weighing, weights were adjusted to reflect their actual weight at time of birth taking into account a newborn's weight changes over time -- ie. dropping over the first few days and increasing beyond that. Key weight predictor variables (gestational age, gender, and vital status) were also used to adjust the weight. Weights taken beyond ten days were coded as missing. If exact hour of weighing was unavailable or if the time of weighing was taken within a very short range of time, weights taken within 72 hours were used, while all other weights were set as missing. Missing weights were multiply imputed using the aforementioned predictor variables. The "mi" command in Stata was used. The prevalences of term-SGA among live births, and SGA among preterm live births were compared with vs. without the imputed birth weights and are shown in the below table. There was no significant difference in the prevalence for either term-SGA or SGA among preterm births. More details are available in a separate publication.³²

	Prevalence Term-SGA (% of total live births)		Prevalence SGA among preterm live births (%)	
	Unimputed	Imputed	Unimputed	Imputed
Bangladesh (2005)	45.2	46.5	17.7	17.6
India (2000)	58.5	58.5	22.3	21.8
Nepal (1999)	51.0	51.0	23.9	20.6
Nepal (2004)	47.8	46.7	25.1	22.2
Burkina Faso (2004)	32.5	31.7	17.6	15.2
Kenya (1995)	25.1	25.7	38.6	38.8

Web appendix 8

Low birthweight rates were obtained from several sources and taken in order of the following hierarchy: 1) National Statistics Offices databases (http://unstats.un.org/unsd/methods/inter-natlinks/sd_natstat.asp), 2) WHO regional databases (<http://www.emro.who.int/entity/statistics/data-and-statistics.html>; <http://data.euro.who.int/hfad/>; <http://www.wpro.who.int/publications/databases/en/>), 3) UNICEF State of the World's Children (<http://www.unicef.org/sowc/>), and 4) World Bank (<http://data.worldbank.org/topic/health>). In countries with available LBW data points for more than half of the years 1990 – 2010, with at least one data point before 1995 and one after 2005, a Loess regression using that country's data was conducted to estimate the LBW rate in 2010. If these criteria were not met, the last available data point was used for the 2010 estimate.

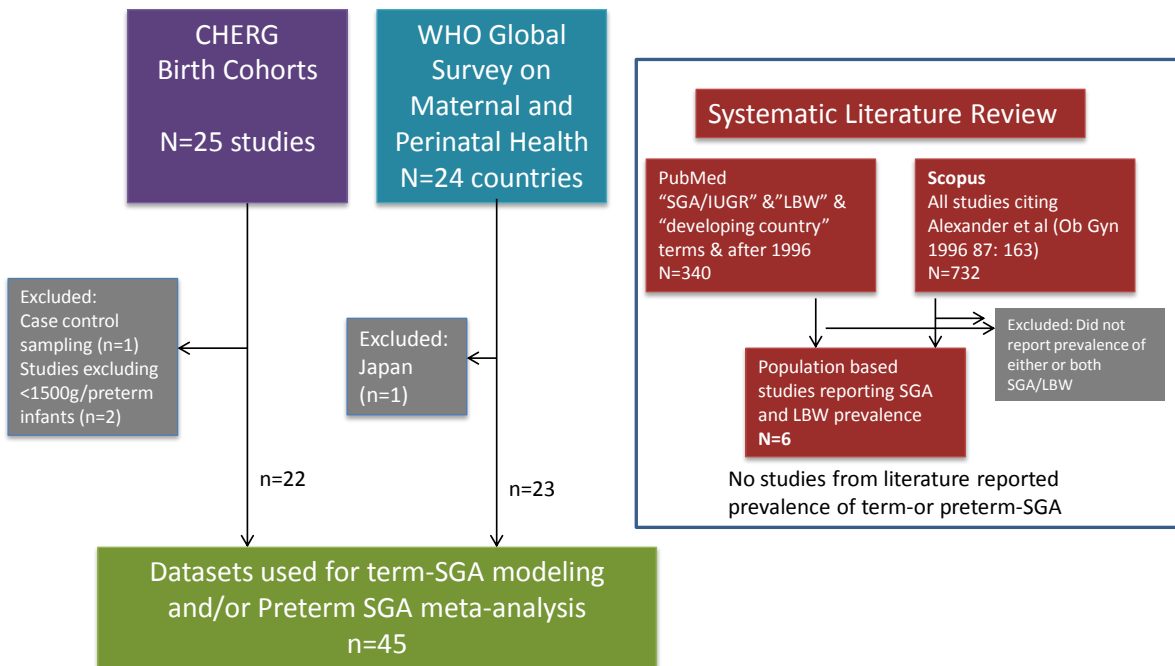
Web appendix 9

Methods of Uncertainty Estimation

For term-SGA, we generated uncertainty estimates by drawing 1000 bootstrapped samples from the modeling dataset, and repeating each step of the estimation process. For each bootstrapped sample, we ran the model and generated a new set of predicted national estimates for the prevalence of term-SGA, including random effects at the regional level. For national level estimates we chose the 2.5 and 97.5 centiles of the 1000 predictions for our uncertainty bounds. To obtain uncertainty ranges for regional- and global-level estimates, we summed the relevant national estimates derived from each bootstrap sample, choosing the 2.5 and 97.5 centiles of the resulting distributions.

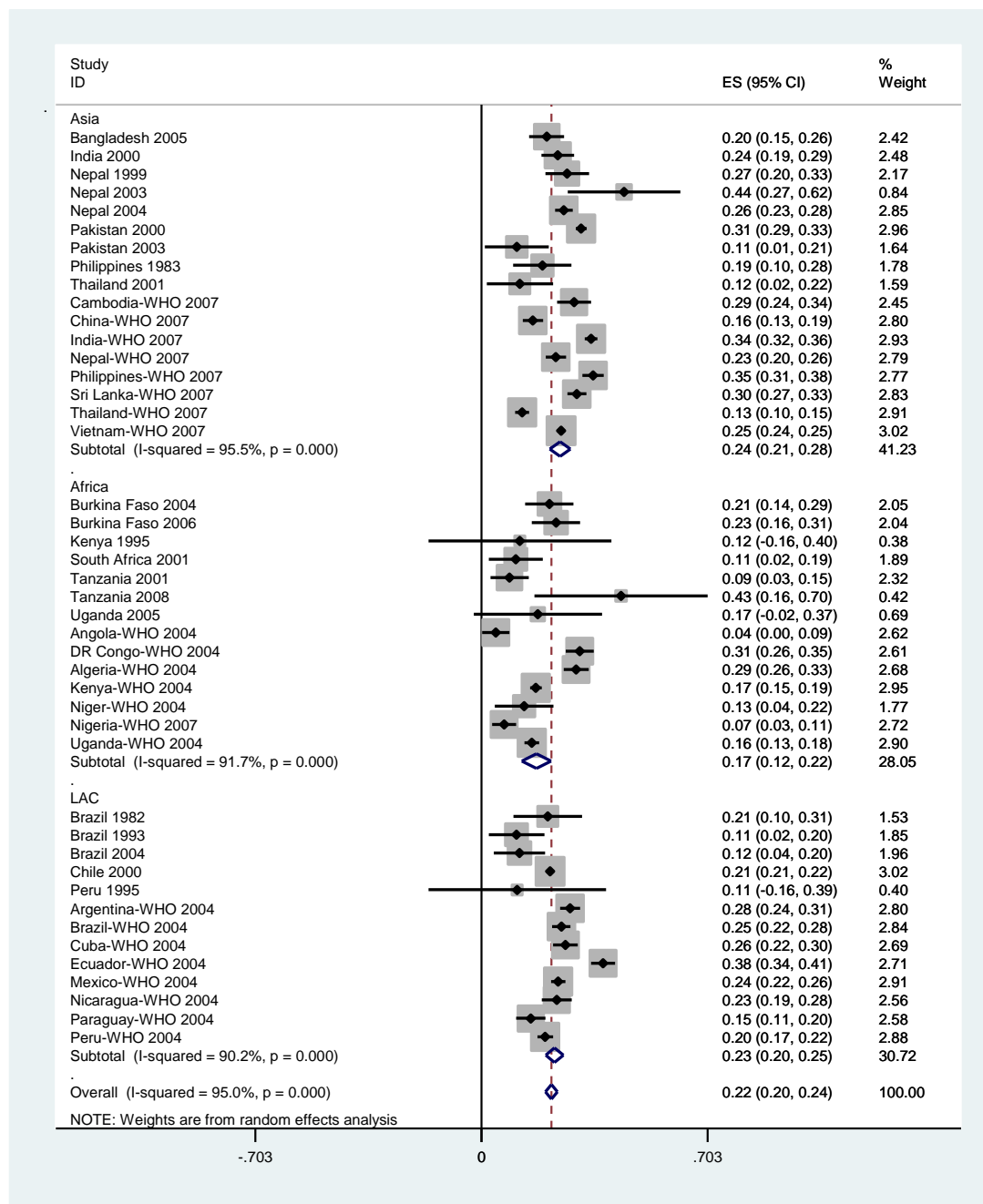
For preterm-SGA, we had three sources of uncertainty – 1) the number of preterm babies; 2) the proportion of preterm infants of gestation <32 or ≥ 32 weeks, and 3) the proportion of SGA within these preterm categories. From our prior analysis, 1000 bootstrapped estimates of preterm prevalence were available for each country and uncertainty estimates for the proportion of preterm infants of gestational <32 weeks, and ≥ 32 weeks.³³ For the meta-analyzed estimates of proportions (proportion of preterm infants <32 weeks, proportion of preterm infants ≥ 32 weeks, proportion of <32 week babies who were SGA, and proportion of ≥ 32 week babies who were SGA), we generated normal distributions of the meta-estimates, and randomly drew 1000 samples from these distributions. We then selected the 2.5 and 97.5 centiles of the products of these 1000 samples as the preterm-SGA uncertainty bounds. For the uncertainty of all SGA, we used the 2.5 and 97.5 centiles of the sum of term-SGA and preterm-SGA from the 1000 samples.

Web appendix 10: Search Strategy for Small-for-Gestational-Age prevalence (Alexander reference)²²



*Detailed search strategy for purple box (“CHERG Birth Cohorts”) presented in Web Appendix 1, detailed search strategy for right hand box (“Systematic Literature Review”) presented in Web Appendix 3

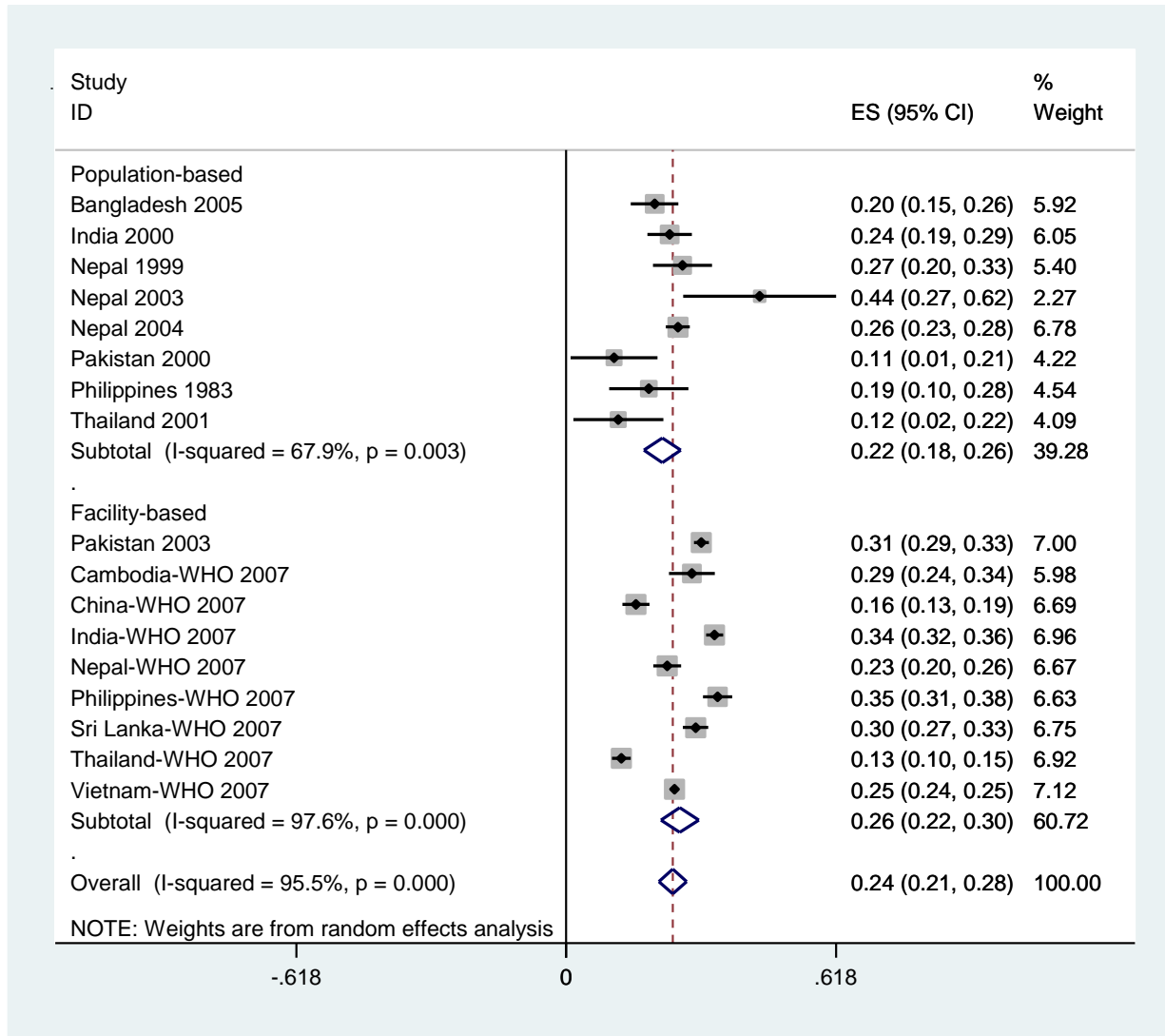
Web appendix 12a) Meta-analysis of prevalence of small-for-gestational-age among moderate to late (32-37 weeks) preterm infants



Included a total of 44 datasets and 151,766 moderate to late preterm births (Asia: 17 datasets, 33,747 moderate to late preterm births; Africa: 14 datasets, 5,979 moderate to late preterm births; Latin America/Caribbean: 13 datasets, 151,766 moderate to late preterm births)

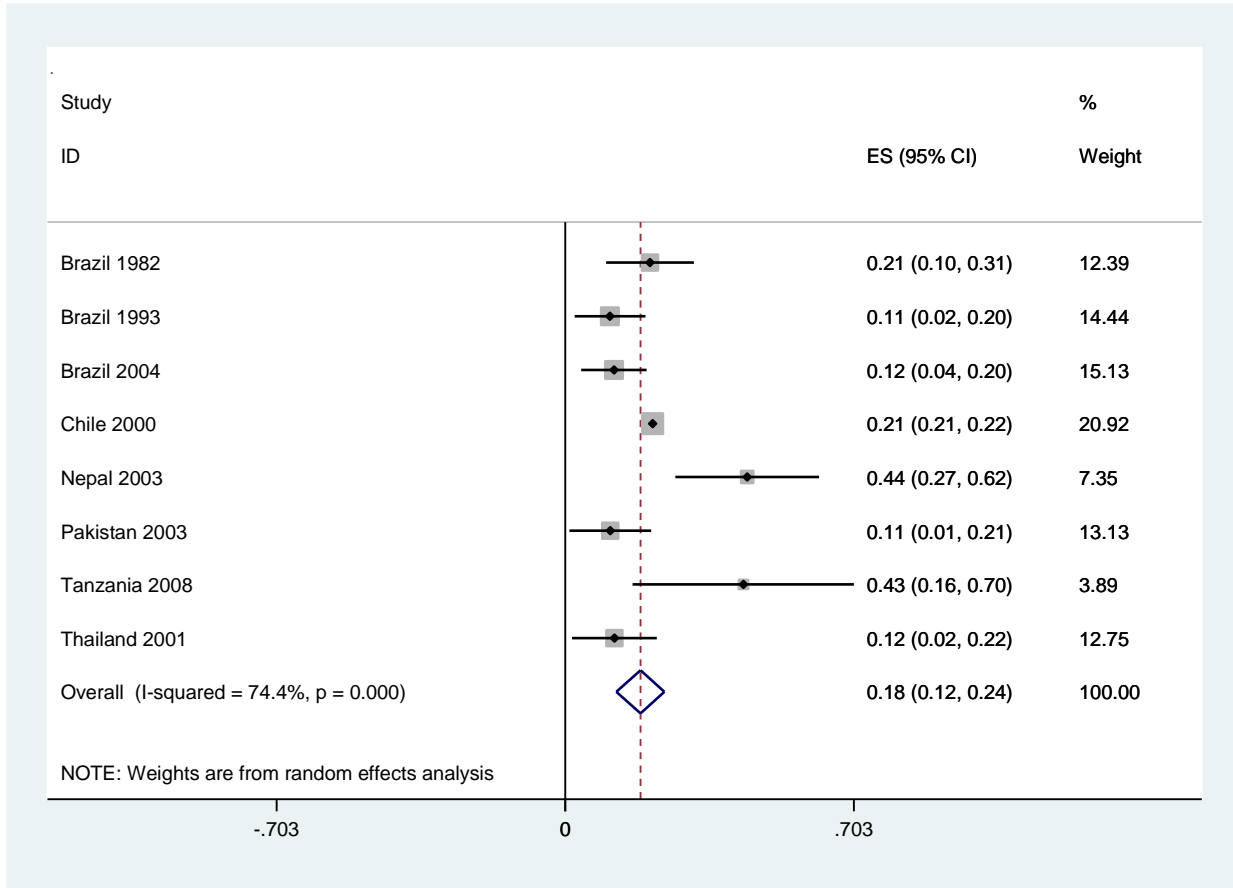
Web appendix 12b) Prevalence of SGA among moderate-late (32-37weeks) infants in Asia:

Population-based vs. Facility-based Studies



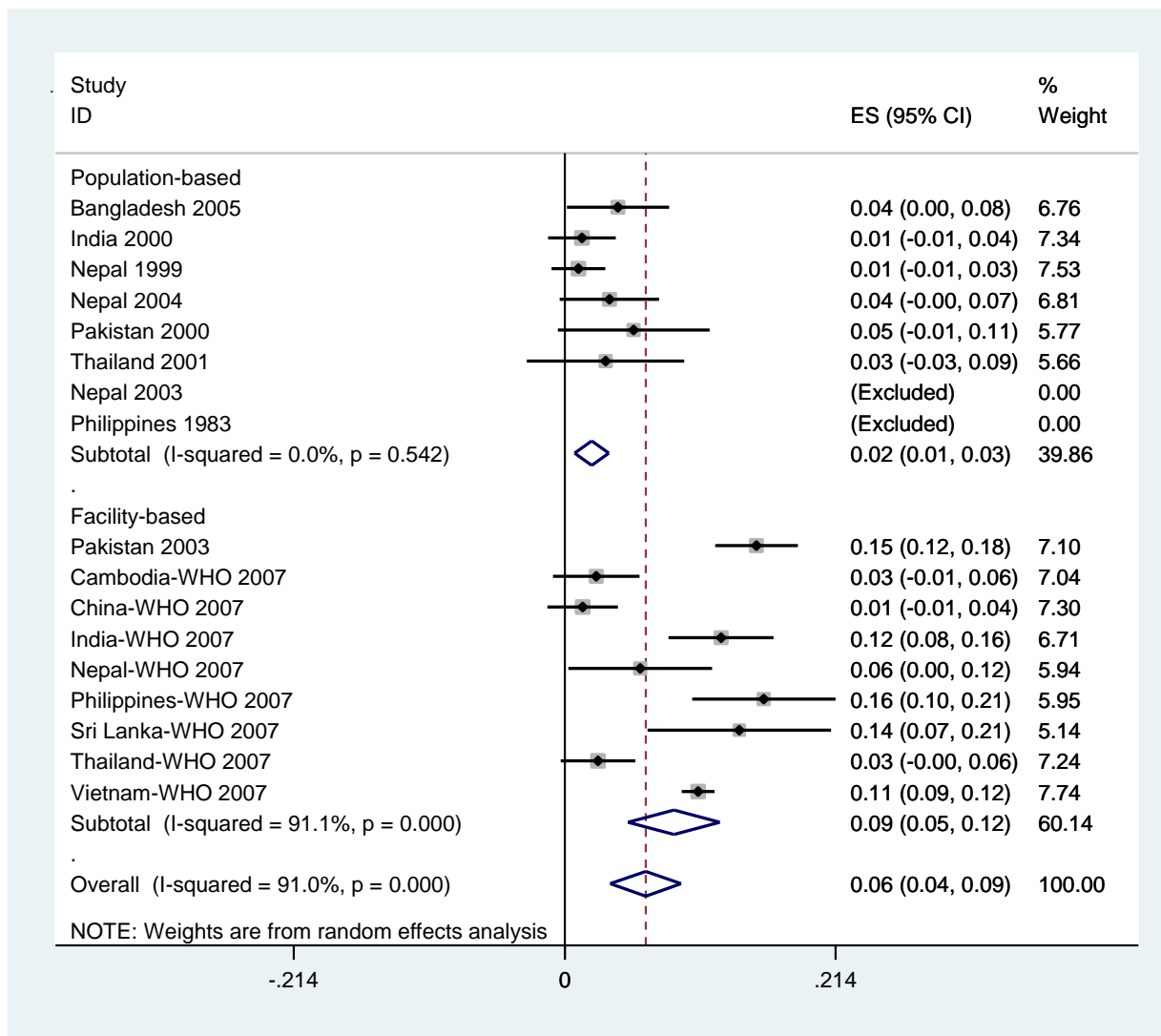
Includes a total of 17 datasets, 33,747 moderate to late preterm births (8 population-based datasets, 8,117 moderate to late preterm births; 9 facility-based datasets, 41,864 moderate to late preterm births).

Web appendix 12c) Prevalence of SGA among moderate-late (32-<37 weeks): Higher Quality Studies



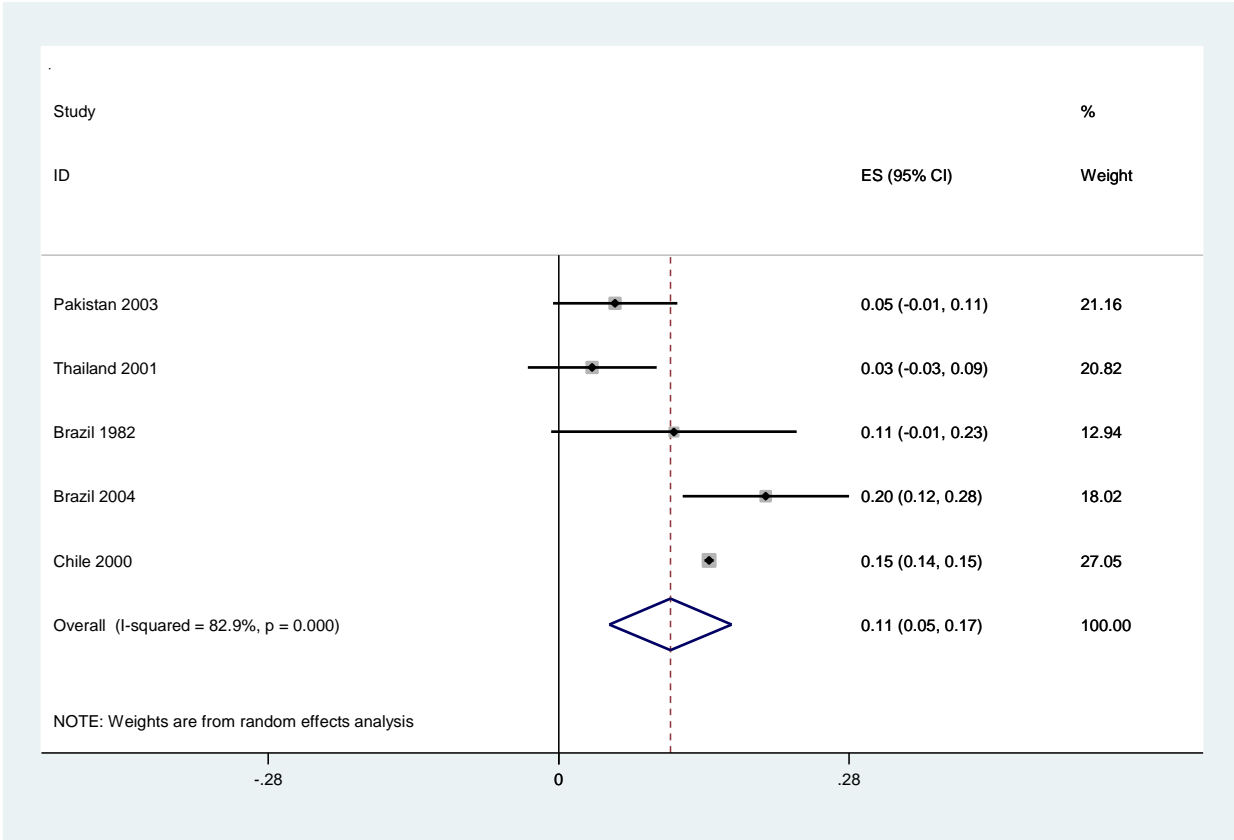
Includes a total of 8 studies, 109,420 moderate to late preterm births.

Web appendix 13a) Meta-analyses of the prevalence of SGA among preterm infants in early preterm (<32 week) infants, Population- vs Facility-based studies in Asia



Includes a total of 15 datasets, 4,862 early preterm births (6 population-based datasets, 469 early preterm births; 9 facility-based datasets, 4,393 early preterm births).

Web appendix 13b) Meta-analyses of the prevalence of SGA among preterm infants in early preterm (<32 week) infants, Higher Quality Studies



Legend: Meta-analysis of 5 studies including 18,673 early preterm births

References: Brazil 1982¹⁷, Brazil 2004^{19,20}, Chile 2000⁶², Pakistan 2003⁷, Thailand 2001⁹

Web appendix 14. Estimates of Small for Gestational Age-Preterm Birth for 138 Low- and Middle-Income Countries by UN-MDG Regions for 2010

Numbers of Live Births in 2010									
	Births 2010	LBW	Preterm	SGA		TSGA		PSGA	
Caucasus and Central Asia	1,643,100	101,000	151,300	240,700	(169800-342400)	207,000	(136300-306900)	33,700	(21400-47900)
Eastern Asia	17,490,400	445,200	1,262,200	1,182,300	(720700-1975000)	900,900	(453400-1714300)	281,400	(194700-356400)
Latin America and the Caribbean	10,844,500	858,100	929,300	1,374,000	(1029700-1788900)	1,180,100	(850600-1580600)	193,900	(152900-277200)
Northern Africa	3,543,000	193,500	259,200	337,600	(239400-461400)	296,000	(201200-415300)	41,600	(24500-65200)
Oceania	263,100	26,000	19,400	55,300	(42700-72000)	51,000	(38300-66700)	4,300	(2500-9200)
South-eastern Asia	10,983,400	1,339,100	1,497,400	2,670,200	(2143400-3318900)	2,336,400	(1832800-2976500)	333,900	(219900-472600)
Southern Asia	38,753,000	9,970,400	5,159,100	17,350,300	(15600000-19400000)	16,200,000	(14600000-18300000)	1,150,300	(829200-1479700)
Sub-Saharan Africa	32,085,500	4,550,600	3,936,700	8,157,300	(6943600-9215500)	7,525,200	(6356700-8541500)	632,200	(433100-887200)
Western Asia	4,855,300	537,700	488,200	1,066,900	(863100-1334300)	958,100	(753900-1226800)	108,900	(71600-156400)
LMIC TOTAL	120,461,300	18,021,600	13,702,800	32,434,800	(29001600-36742300)	29,654,600	(26147800-33847900)	2,780,100	(2114200-347700)

Birth Prevalence (per 100 live births) in 2010									
	Births 2010	LBW	Preterm	SGA		TSGA		PSGA	
Caucasus and Central Asia	1,643,100	6.3	9.5	15.0	(10.6-21.4)	12.9	(8.5-19.2)	2.1	(1.3-3)
Eastern Asia	17,490,400	2.6	7.4	7.0	(4.2-11.6)	5.3	(2.7-10.1)	1.7	(1.1-2.1)
Latin America and the Caribbean	10,844,500	7.8	8.4	12.5	(9.4-16.3)	10.7	(7.7-14.4)	1.8	(1.4-2.5)
Northern Africa	3,543,000	5.5	7.4	9.6	(6.8-13.2)	8.5	(5.7-11.9)	1.2	(0.7-1.9)
Oceania	263,100	9.9	7.4	21.0	(16.2-27.4)	19.4	(14.6-25.3)	1.6	(1-3.5)
South-eastern Asia	10,983,400	12.2	13.6	24.3	(19.5-30.2)	21.2	(16.7-27.1)	3.0	(2-4.3)
Southern Asia	38,753,000	25.6	13.2	44.5	(40-49.7)	41.5	(37.4-46.9)	2.9	(2.1-3.8)
Sub-Saharan Africa	32,085,500	14.2	12.3	25.5	(21.7-28.8)	23.5	(19.9-26.7)	2.0	(1.4-2.8)
Western Asia	4,855,300	11.0	10.0	21.8	(17.6-27.2)	19.6	(15.4-25)	2.2	(1.5-3.2)
LMIC TOTAL	120,461,300	15.0	11.4	27.0	(24.1-30.5)	24.7	(21.7-28.1)	2.3	(1.7-2.9)

Web appendix 15. National Estimates of Small for Gestational Age-Preterm Birth for 138 Low- and Middle-Income Countries for 2010

Country	Birth Prevalence (per 100 live births) in 2010										Number of Live Births 2010					
	Live births 2010 ¹	NMR 2010 ²	LBW ³	Preterm Birth ⁴	SGA (UR)	TSGA (UR)	PSGA (UR)	SGA (UR)	TSGA (UR)	PSGA (UR)	SGA (UR)	TSGA (UR)	PSGA (UR)			
Afghanistan	1.40E+06	36.8	20.0	11.5	40.0 (34.6-45.6)	37.4 (32.3-42.6)	2.6 (1-5.3)	553,600 (484900-637900)	518,000 (452900-596700)	35,700 (14700-73700)						
Algeria	714400	17.2	5.8	7.4	10.6 (7.7-14.2)	9.4 (6.7-12.8)	1.2 (0.7-2.3)	75,800 (55200-101600)	67,300 (48100-91600)	8,500 (4700-16800)						
Angola	794700	43.8	12.4	12.5	25.6 (21.9-29.5)	23.6 (20-27.2)	2.0 (0.8-4.1)	203,300 (174000-234200)	187,400 (158900-215900)	15,900 (6400-32600)						
Antigua and Barbuda	1600	4.4	5.8	5.8	9.0 (6.1-12.7)	7.7 (5-11.3)	1.3 (0.8-2.5)	100 (100-200)	100 (100-200)	21 (12-40)						
Argentina	693500	7.7	7.1	8.0	11.3 (8.2-15)	9.6 (6.6-13.4)	1.7 (1.5-1.9)	78,100 (57200-104200)	66,600 (45900-92800)	11,600 (10200-13000)						
Armenia	47300	11.5	7.4	11.0	16.4 (11.5-22.5)	13.9 (9.4-20.1)	2.5 (1-5.3)	7,800 (5500-10600)	6,600 (4500-9500)	1,200 (500-2500)						
Azerbaijan	182000	19.7	6.9	8.5	16.2 (11.4-22.5)	14.3 (9.8-20.6)	1.9 (1-4.1)	29,500 (20700-40900)	26,100 (17800-37500)	3,400 (1800-7400)						
Bahamas	5300	7.3	11.6	9.5	16.7 (12.5-21.7)	14.7 (10.6-19.3)	2.0 (1.3-3.7)	900 (700-1200)	800 (600-1000)	100 (100-200)						
Bahrain	22900	3.9	9.9	14.0	19.6 (14.4-25.9)	16.5 (11.6-22.8)	3.1 (2-4.2)	4,500 (3300-5900)	3,800 (2700-5200)	700 (500-1000)						
Bangladesh	3.00E+06	27.5	21.6	14.0	39.6 (35.7-45.6)	36.5 (32.6-42.1)	3.1 (2.2-4.3)	1,203,000 (1071800-1369200)	1,108,500 (977700-1262100)	94,600 (66400-128500)						
Barbados	3000	9.9	11.7	8.9	17.3 (12.9-22)	15.2 (11.1-19.7)	2.1 (1.2-3.3)	500 (400-700)	500 (300-600)	100 (0-100)						
Belize	7700	8.5	14.4	10.4	20.0 (15.4-25.6)	17.8 (13.1-23)	2.2 (1.5-4)	1,500 (1200-2000)	1,400 (1000-1800)	200 (100-300)						
Benin	350300	31.3	14.9	10.6	25.8 (21.5-29.4)	24.1 (20-27.6)	1.7 (0.9-3.6)	90,300 (75400-103100)	84,400 (70000-96500)	5,900 (3300-12500)						
Bhutan	14900	25.4	9.3	10.2	21.7 (16.5-28.8)	19.5 (14.5-25.6)	2.2 (0.9-5)	3,200 (2500-4300)	2,900 (2200-3800)	300 (100-700)						
Bolivia	598500	22.7	4.9	8.1	9.8 (6.1-12.6)	8.1 (5.4-11.6)	1.7 (0.4-1.6)	58,800 (36700-75400)	48,600 (32200-69500)	10,100 (2500-9700)						
Botswana	47200	11.7	13.1	15.1	20.4 (15.3-25.5)	18.0 (12.9-22.8)	2.4 (0.9-4)	9,600 (7200-12000)	8,500 (6100-10800)	1,100 (400-1900)						
Brazil	3.00E+06	10.3	8.4	9.2	13.4 (9.9-17.6)	11.5 (8.2-15.5)	1.9 (1.2-3.1)	405,400 (296500-528900)	347,100 (247200-466100)	58,300 (37100-94300)						
Brunei Darussalam	7600	4.0	11.1	12.1	20.7 (15.6-28.2)	18.1 (13.1-24.6)	2.6 (1.2-6.1)	1,600 (1200-2100)	1,400 (1000-1900)	200 (100-500)						
Burkina Faso	713200	34.6	10.6	10.9	20.8 (17.5-24.1)	19.1 (15.9-22.3)	1.7 (1-2.6)	148,400 (124800-171600)	135,900 (113100-158800)	12,500 (6900-18700)						
Burundi	283000	43.6	11.2	11.4	23.6 (20.1-27.6)	21.8 (18.4-25.2)	1.8 (0.7-3.9)	66,800 (57000-78100)	61,600 (52000-71400)	5,200 (2000-11100)						
Cambodia	318200	20.6	8.0	10.5	18.7 (13.8-25.3)	16.4 (11.6-22.5)	2.4 (1-5.2)	59,600 (43900-80600)	52,100 (36900-71700)	7,500 (3100-16500)						
Cameroon	709900	33.5	10.8	12.6	21.2 (17.6-24.8)	19.1 (15.9-22.4)	2.0 (1-3.7)	150,200 (125100-175800)	135,900 (113000-158900)	14,300 (7200-26000)						
Cape Verde	10300	10.2	6.0	11.2	10.8 (7.6-14.6)	9.0 (6.2-12.5)	1.9 (0.7-3)	1,100 (800-1500)	900 (600-1300)	200 (100-300)						
Central African Republic	154200	46.2	13.0	12.6	27.0 (22.9-31.5)	25.0 (21.1-28.7)	2.0 (0.8-4.6)	41,700 (35300-48500)	38,500 (32600-44300)	3,100 (1300-7000)						
Chad	503200	42.6	21.7	13.1	36.8 (31.6-42.5)	34.7 (29.5-39.8)	2.1 (0.8-4.5)	185,100 (159100-213900)	174,600 (148700-200000)	10,600 (3900-22800)						
Chile	245500	4.7	6.1	7.1	9.6 (6.8-13.2)	8.1 (5.3-11.7)	1.5 (1.3-1.7)	23,500 (16600-32400)	19,800 (13000-28800)	3,700 (3200-4200)						
China	1.70E+07	9.4	2.4	7.1	6.5 (3.8-10.7)	4.9 (2.3-9.2)	1.6 (1.1-2)	1,072,100 (648300-1817600)	810,700 (570100-1157000)	261,400 (184000-332300)						
Colombia	913900	11.6	9.0	8.8	14.2 (10.7-18.3)	12.4 (9-16.4)	1.8 (1.3-2.2)	129,900 (98100-167300)	113,100 (81800-150300)	16,900 (12100-20300)						
Comoros	27600	32.1	25.0	16.7	37.6 (30.8-43.8)	34.9 (28.8-40.5)	2.7 (1.1-5)	10,400 (8500-12100)	9,600 (8000-11200)	700 (300-1400)						
Congo	142500	31.9	13.1	16.7	24.6 (20.5-28.2)	22.0 (18.2-25.4)	2.7 (1.1-4.2)	35,100 (29200-40100)	31,300 (25900-36200)	3,800 (1600-5900)						
Costa Rica	73300	6.1	6.3	13.6	11.3 (7.7-15.3)	8.5 (5.6-12.1)	2.8 (1.2-5.1)	8,300 (5700-11200)	6,200 (4100-8900)	2,100 (900-3700)						
Cote d'Ivoire	673100	41.5	16.7	14.0	31.0 (26.7-35.4)	28.8 (24.6-32.7)	2.3 (0.9-4.7)	208,700 (180000-238100)	193,500 (165700-219800)	15,200 (6100-31700)						
Cuba	111600	2.8	5.4	6.4	8.4 (5.7-11.9)	7.1 (4.5-10.5)	1.3 (1.1-1.7)	9,400 (6400-13300)	7,900 (5000-11700)	1,500 (1200-1800)						
Democratic PR Korea	347600	17.5	6.7	10.7	16.0 (11.1-22.4)	13.6 (9.2-19.9)	2.4 (1-5)	55,700 (38500-77800)	47,400 (31900-69200)	8,300 (3500-17300)						
DR Congo	2.90E+06	47.4	9.6	11.9	21.9 (18-26)	20.0 (16.3-23.6)	1.9 (0.8-4)	629,400 (523000-754900)	574,600 (471400-684500)	54,800 (23900-115900)						
Djibouti	25700	33.3	20.0	11.9	32.3 (27-37)	30.4 (25.2-34.7)	1.9 (0.7-4)	8,300 (6900-9500)	7,800 (6500-8900)	500 (200-1000)						
Dominica	1200	8.6	9.7	11.9	14.5 (11.5-20.7)	12.8 (9.2-17.1)	1.7 (1.4-5.6)	200 (100-200)	200 (100-200)	21 (16-68)						
Dominican Republic	216400	14.3	7.7	10.8	13.4 (9.9-18)	11.1 (8-14.8)	2.2 (1.2-4.7)	28,900 (21400-38900)	24,000 (17300-32000)	4,900 (2600-10100)						
Ecuador	298900	10.5	6.1	5.1	9.7 (6.9-13.7)	8.6 (5.8-12.2)	1.1 (0.5-2.6)	29,000 (20500-40900)	25,800 (17400-36400)	3,200 (1600-7800)						

Country	Birth Prevalence (per 100 live births) in 2010								Number of Live Births 2010					
	Live births 2010 ¹	NMR 2010 ²	LBW ³	Preterm Birth ⁴	SGA (UR)	TSGA (UR)	PSGA (UR)	SGA (UR)	TSGA (UR)	PSGA (UR)				
Egypt	1.90E+06	7.8	6.0	7.3	9.9 (6.8-13.4)	8.7 (5.8-12.2)	1.2 (0.5-2)	186,300 (128700-254900)	164,300 (110800-232200)	22,000 (10000-37100)				
El Salvador	125800	6.7	9.8	12.8	15.3 (11.2-20.8)	12.6 (9-16.9)	2.7 (1.1-6.3)	19,300 (14100-26200)	15,900 (11300-21300)	3,400 (1400-8000)				
Equatorial Guinea	25800	38.0	12.8	16.5	25.5 (21.5-29.6)	22.9 (19.3-26.2)	2.6 (1.1-5.1)	6,600 (5500-7600)	5,900 (5000-6800)	700 (300-1300)				
Eritrea	190600	21.9	14.1	12.2	23.1 (18.2-27.5)	21.1 (16.4-25.3)	2.0 (0.9-4)	43,900 (34700-52500)	40,200 (31300-48100)	3,700 (1600-7600)				
Ethiopia	2.60E+06	32.4	20.3	10.1	32.1 (26.9-36.8)	30.5 (25.4-35.1)	1.6 (0.9-2.3)	838,000 (698900-957600)	795,700 (660400-912400)	42,300 (24300-60200)				
Fiji	18500	7.9	9.0	9.9	18.0 (13-24.5)	15.8 (11.1-22)	2.2 (0.9-4.3)	3,300 (2400-4500)	2,900 (2100-4100)	400 (200-800)				
Gabon	40900	24.8	14.3	16.3	24.6 (19.7-28.7)	21.9 (17.5-25.8)	2.6 (1.1-4.9)	10,000 (8100-11800)	9,000 (7100-10600)	1,100 (500-2000)				
Gambia	65900	34.5	19.9	14.0	32.8 (27.5-37.8)	30.6 (25.5-34.9)	2.2 (0.9-4.9)	21,600 (18100-24900)	20,200 (16800-23000)	1,500 (600-3200)				
Georgia	51800	15.1	6.8	8.8	15.4 (10.7-21.6)	13.5 (9-19.7)	2.0 (1.1-2.9)	8,000 (5600-11200)	7,000 (4700-10200)	1,000 (600-1500)				
Ghana	769700	29.9	13.4	14.5	24.2 (20.1-28.3)	21.9 (18.1-25.4)	2.3 (0.9-4.9)	186,600 (154700-217900)	168,700 (139000-195900)	17,900 (6900-37600)				
Grenada	2000	6.7	7.5	10.3	12.1 (8.8-16.5)	10.0 (6.9-13.8)	2.1 (1.2-4.6)	200 (200-300)	200 (100-300)	42 (23-92)				
Guatemala	466600	15.0	8.3	7.7	13.6 (10.4-17.4)	12.0 (8.7-15.9)	1.6 (1-2.7)	63,300 (48600-81300)	55,800 (40700-74200)	7,500 (4800-12500)				
Guinea	389900	39.9	12.2	13.9	24.7 (21-28.7)	22.4 (19.1-25.7)	2.2 (0.9-4.8)	96,200 (81900-112000)	87,500 (74400-100100)	8,700 (3400-18600)				
Guinea-Bissau	58200	43.9	23.9	11.2	39.1 (33.5-45)	37.3 (31.8-42.9)	1.8 (0.7-3.7)	22,700 (19500-26200)	21,700 (18500-25000)	1,000 (400-2100)				
Guyana	13600	20.1	11.2	13.2	19.1 (15.1-24.2)	16.3 (12.4-20.5)	2.8 (1.6-6)	2,600 (2100-3300)	2,200 (1700-2800)	400 (200-800)				
Haiti	266500	27.3	24.6	14.1	34.8 (28.2-42.3)	31.9 (25.1-38.5)	2.9 (1.7-6.3)	92,700 (75100-112600)	84,900 (66800-102700)	7,800 (4400-16800)				
Honduras	203400	11.0	10.2	12.2	16.2 (12.3-21.6)	13.7 (10-18)	2.5 (1.4-5.7)	33,000 (25100-43900)	27,900 (20300-36600)	5,200 (2800-11500)				
India	2.70E+07	33.1	27.6	13.0	46.9 (42.6-53)	44.0 (40-50)	2.9 (2-3.8)	12,800,000 (11500000-14300000)	12,000,000 (10800000-13500000)	784,600 (543500-1019300)				
Indonesia	4.40E+06	15.9	11.1	15.5	23.8 (18.5-29.8)	20.4 (15.4-26.3)	3.4 (1.9-4.8)	1,042,300 (814800-1309300)	891,600 (677600-1158300)	150,700 (85200-211300)				
Iran (Islamic Republic of)	1.30E+06	14.3	7.2	12.9	16.9 (12-22.3)	14.0 (9.3-19.7)	2.9 (1.8-4)	214,200 (156500-290200)	177,600 (120600-256000)	36,500 (23600-52000)				
Iraq	1.10E+06	20.2	5.6	6.5	13.5 (9.3-20.3)	12.0 (7.9-18.6)	1.5 (0.7-3.3)	151,700 (102000-223000)	135,300 (86900-204800)	16,400 (7500-36200)				
Jamaica	50600	11.8	12.1	10.2	18.1 (14-23.4)	16.0 (11.7-20.4)	2.1 (1.4-4.9)	9,200 (7100-11800)	8,100 (5900-10300)	1,100 (700-2500)				
Jordan	153500	12.3	8.4	14.4	18.9 (13.4-25.2)	15.7 (11-21.8)	3.2 (1.1-5)	29,000 (20600-38700)	24,000 (16800-33500)	4,900 (1700-7600)				
Kazakhstan	344100	14.7	7.5	8.8	16.6 (11.8-22.8)	14.6 (10-20.8)	2.0 (1.2-2.6)	57,000 (40500-78300)	50,200 (34500-71500)	6,800 (4200-8900)				
Kenya	1.50E+06	27.2	7.7	12.3	15.5 (12.7-19.5)	13.5 (10.8-17.3)	2.0 (1.1-2.9)	236,800 (190100-292600)	206,600 (161700-259300)	30,200 (17100-43100)				
Kiribati	2000	19.4	8.2	9.6	18.7 (13.7-25.3)	16.5 (11.7-22.7)	2.2 (0.9-4.5)	400 (300-500)	300 (200-500)	45 (19-91)				
Kuwait	49200	5.4	7.6	10.6	15.7 (11-22.3)	13.4 (8.9-19.5)	2.4 (0.9-4.9)	7,700 (5400-11000)	6,600 (4400-9600)	1,200 (500-2400)				
Kyrgyzstan	129800	16.2	6.2	10.4	14.9 (10-21.5)	12.6 (8.3-18.8)	2.3 (1-4.8)	19,300 (13000-27900)	16,300 (10700-24400)	3,000 (1300-6200)				
Lao People's Democratic Republic	141100	18.1	10.8	10.8	22.8 (17.5-29.5)	20.4 (15.5-26.5)	2.4 (1.1-5.5)	32,200 (24700-41600)	28,800 (21900-37300)	3,400 (1500-7800)				
Lebanon	65000	5.6	6.0	7.9	12.6 (8.4-18.6)	10.9 (6.8-16.8)	1.7 (1.1-2.3)	8,200 (5500-12100)	7,100 (4400-10900)	1,100 (700-1500)				
Lesotho	60400	39.0	10.5	11.9	21.7 (18.2-25.5)	19.8 (16.5-23)	1.9 (0.7-4)	13,100 (11000-15400)	11,900 (10000-13900)	1,200 (400-2400)				
Liberia	153700	28.4	13.7	13.9	24.2 (19.9-28.6)	22.0 (18-25.6)	2.2 (0.9-4.8)	37,200 (30500-44000)	33,800 (27600-39300)	3,400 (1400-7400)				
Libyan Arab Jamahiriya	145000	10.1	4.0	8.3	7.5 (5-11.2)	6.2 (3.9-9.3)	1.3 (0.5-2.8)	10,900 (7200-16200)	8,900 (5600-13400)	1,900 (800-4100)				
Madagascar	731900	23.7	15.6	14.2	25.5 (20.2-30)	23.2 (18.4-27.3)	2.3 (0.9-4.7)	186,600 (147500-219600)	169,900 (134700-200100)	16,700 (6800-34700)				
Malawi	662700	27.8	12.5	18.1	23.2 (19.1-27)	20.3 (16.5-24)	2.9 (1.7-4.3)	153,900 (126500-178800)	134,700 (109400-158800)	19,200 (11400-28200)				
Malaysia	576400	3.6	11.1	12.3	20.8 (15.3-27.9)	18.0 (13-24.5)	2.7 (1.2-5.7)	119,700 (88100-161000)	103,900 (75000-141400)	15,800 (6700-33000)				
Maldives	5300	7.4	9.9	7.9	18.7 (13.9-25)	17.1 (12.3-23.3)	1.7 (1-2.4)	1,000 (700-1300)	900 (700-1200)	89 (55-129)				
Mali	714100	49.7	18.7	11.6	35.2 (30.2-40.9)	33.3 (28.5-38.5)	1.9 (0.8-4.1)	251,400 (215300-292000)	238,100 (203800-275100)	13,300 (5400-29500)				
Marshall Islands	1100	12.2	15.4	11.5	27.4 (22.3-34.2)	25.3 (20.2-31.4)	2.0 (1-5.4)	300 (200-400)	300 (200-300)	22 (11-60)				
Mauritania	116800	40.5	33.7	15.4	47.0 (39.1-54.9)	44.5 (37.2-52.2)	2.5 (1-4.8)	54,900 (45700-64100)	52,000 (43400-60900)	2,900 (1100-5600)				
Mauritius	16600	9.4	13.9	12.6	20.4 (14.7-25.9)	18.4 (12.9-23.6)	2.0 (0.8-4.2)	3,400 (2400-4300)	3,100 (2100-3900)	300 (100-700)				

Country	Birth Prevalence (per 100 live births) in 2010										Number of Live Births 2010					
	Live births 2010 ¹	NMR 2010 ²	LBW ³	Preterm Birth ⁴	SGA (UR)	TSGA (UR)	PSGA (UR)	SGA (UR)	TSGA (UR)	PSGA (UR)	SGA (UR)	TSGA (UR)	PSGA (UR)			
Mexico	2.20E+06	7.4	6.1	7.3	9.9 (7.1-13.5)	8.3 (5.6-12.1)	1.5 (1.3-1.8)	218,800 (155100-297500)	184,800 (122900-265400)	33,900 (29300-39600)						
Micronesia (Federated States of)	2700	17.5	11.1	10.5	23.2 (17.9-29.7)	20.7 (15.8-26.7)	2.5 (1.4-9)	600 (500-800)	600 (400-700)	100 (0-100)						
Mongolia	64700	12.4	3.8	13.5	10.8 (7.1-16.1)	7.8 (4.4-13.2)	3.0 (1.4-4.8)	7,000 (4600-10400)	5,000 (2800-8600)	1,900 (900-3100)						
Morocco	623400	19.3	3.8	6.7	7.6 (5.2-11.1)	6.5 (4.2-9.7)	1.1 (0.4-2.5)	47,500 (32600-69100)	40,800 (26400-60400)	6,700 (2500-15400)						
Mozambique	882800	34.6	15.2	16.4	27.9 (23.6-31.7)	25.2 (21.2-28.6)	2.6 (1.1-4.2)	245,900 (207900-279600)	222,700 (187200-252500)	23,300 (9900-37000)						
Myanmar	830100	30.5	15.0	12.4	32.1 (27-38.3)	29.3 (24.5-35.1)	2.8 (1.1-5.6)	266,200 (224200-317700)	243,300 (203500-291400)	22,900 (9400-46100)						
Namibia	60000	18.7	15.7	14.4	24.6 (18.9-29.4)	22.2 (16.8-26.8)	2.3 (0.9-4.6)	14,700 (11400-17700)	13,300 (10100-16100)	1,400 (500-2800)						
Nepal	723500	27.9	21.2	14.0	39.3 (34.7-44.4)	36.2 (31.9-41.3)	3.1 (1.9-4.3)	284,400 (251200-321200)	261,700 (230900-298900)	22,600 (13500-31300)						
Nicaragua	138400	13.0	9.0	9.3	14.5 (10.8-19.5)	12.6 (9.1-16.6)	1.9 (1.1-4.8)	20,100 (14900-27000)	17,400 (12600-23000)	2,700 (1500-6700)						
Niger	754900	32.7	26.7	9.4	38.1 (31.2-44.9)	36.6 (30-42.6)	1.5 (0.8-4.1)	287,800 (235300-338600)	276,400 (226800-321500)	11,400 (5700-30600)						
Nigeria	6.30E+06	40.2	11.7	12.2	23.7 (20.2-27.1)	21.8 (18.5-25.1)	2.0 (1.2-2.8)	1,503,800 (1275300-1709100)	1,379,500 (1167400-1583100)	124,200 (76700-177100)						
Oman	49600	5.5	9.9	14.3	19.9 (14.7-26.3)	16.7 (11.9-22.9)	3.2 (1.7-4.8)	9,900 (7300-13100)	8,300 (5900-11400)	1,600 (800-2400)						
Pakistan	4.70E+06	36.1	26.0	15.8	47.0 (42.8-53.8)	43.5 (39.4-49.9)	3.5 (2.2-5)	2,228,100 (2012200-2529800)	2,061,300 (1854100-2345000)	166,800 (102300-234100)						
Panama	70000	9.1	8.5	8.1	13.2 (9.7-17.4)	11.5 (8.1-15.5)	1.7 (1.1-2.9)	9,200 (6800-12200)	8,000 (5700-10900)	1,200 (800-2000)						
Papua New Guinea	207200	23.0	10.0	6.5	21.6 (16.6-28.2)	20.1 (15.2-26.1)	1.5 (0.7-3.7)	44,800 (34500-58400)	41,700 (31500-54100)	3,000 (1500-7700)						
Paraguay	156400	13.2	6.3	7.8	10.8 (7.7-14.9)	9.2 (6.3-12.8)	1.6 (0.9-4.4)	16,900 (12000-23400)	14,300 (9900-19900)	2,500 (1400-6900)						
Peru	593900	9.8	7.1	7.3	11.4 (8.1-15.1)	9.8 (6.9-13.5)	1.5 (0.9-2.4)	67,500 (48200-89900)	58,400 (40800-80400)	9,100 (5500-14500)						
Philippines	2.30E+06	12.6	19.6	14.9	33.6 (27.9-40.8)	30.2 (25.5-36.7)	3.3 (1.4-6.8)	786,700 (641600-937900)	708,900 (586500-843900)	77,800 (32100-155700)						
Qatar	20700	4.2	7.1	10.5	14.8 (10.1-21.2)	12.4 (8-18.5)	2.4 (0.9-4.9)	3,100 (2100-4400)	2,600 (1700-3800)	500 (200-1000)						
Republic of Korea	478100	2.1	4.4	9.2	10.0 (6.2-15.4)	7.9 (4.4-13.4)	2.0 (1.1-3.9)	47,600 (29700-73700)	37,800 (21100-63900)	9,800 (5100-18700)						
Rwanda	437500	22.8	6.3	9.5	12.3 (9.4-16.4)	10.8 (8.1-14.2)	1.5 (0.6-3.6)	53,900 (41200-71700)	47,300 (35300-61900)	6,700 (2800-15800)						
Saint Lucia	3100	9.5	10.1	11.1	15.4 (11.7-20.5)	13.4 (9.7-17.7)	2.0 (1.2-4.5)	500 (400-600)	400 (300-500)	100 (0-100)						
Saint Vincent and the Grenadines	1900	13.3	7.9	11.8	13.4 (10.3-18.2)	11.2 (8.1-15)	2.2 (1.3-5.2)	300 (200-300)	200 (200-300)	42 (26-98)						
Samoa	4500	7.8	1.2	5.5	3.5 (1.9-7.1)	2.5 (1-5.7)	1.0 (0.5-2.8)	200 (100-300)	100 (0-300)	45 (23-128)						
Sao Tome and Principe	5200	29.4	7.8	10.5	15.5 (12.5-19.4)	14.0 (11-17.4)	1.5 (0.7-3.5)	800 (700-1000)	700 (600-900)	100 (0-200)						
Saudi Arabia	594600	5.8	7.5	6.0	14.6 (10-20.6)	13.3 (8.8-19.4)	1.3 (0.8-1.8)	86,800 (59200-122600)	78,900 (52300-115100)	8,000 (4900-10700)						
Senegal	465400	26.9	18.8	9.7	29.0 (23.5-34)	27.5 (22.2-31.9)	1.6 (0.7-3.9)	135,200 (109200-158200)	127,900 (103400-148600)	7,300 (3100-18300)						
Seychelles	1100	8.7	10.0	11.6	15.3 (11.4-20.4)	13.9 (9.7-18.2)	1.5 (0.8-4)	200 (100-200)	200 (100-200)	16 (9-44)						
Sierra Leone	226400	49.9	13.6	10.0	28.4 (24.2-32.7)	26.7 (22.7-30.8)	1.6 (0.6-3.3)	64,200 (54700-74100)	60,500 (51500-69800)	3,600 (1400-7600)						
Singapore	45400	1.2	9.3	11.5	17.7 (12.4-24.4)	15.2 (10.4-21.5)	2.6 (1.1-5.4)	8,100 (5600-11100)	6,900 (4700-9800)	1,200 (500-2400)						
Solomon Islands	17200	10.7	12.5	12.4	24.0 (18.9-30.3)	21.3 (16.3-27.3)	2.7 (1.2-6)	4,100 (3300-5200)	3,700 (2800-4700)	500 (200-1000)						
Somalia	407700	50.1	11.2	12.0	25.1 (20.8-29.3)	23.2 (19.2-27.1)	1.9 (0.8-3.8)	102,300 (84800-119300)	94,500 (78200-110400)	7,800 (3200-15600)						
South Africa	1.10E+06	19.6	15.1	8.0	23.0 (17.1-26.6)	21.8 (16-25.2)	1.3 (0.7-2.7)	244,100 (187600-292800)	230,500 (176500-277100)	13,600 (7400-29600)						
Sri Lanka	378400	7.9	13.4	10.7	24.3 (18.7-30.8)	21.9 (16.7-28.1)	2.4 (1.4-4.2)	91,800 (70900-116400)	82,700 (63100-106500)	9,100 (5400-15900)						
Sudan	1.40E+06	31.5	30.7	13.2	41.7 (34.7-49.8)	39.5 (32.8-47.4)	2.1 (1.2-3.4)	595,200 (485900-696600)	565,000 (459300-663900)	30,200 (16200-47400)						
Suriname	9700	16.3	10.9	8.8	17.3 (13.2-21.8)	15.3 (11.5-19.6)	1.9 (1.2-3.3)	1,700 (1300-2100)	1,500 (1100-1900)	200 (100-300)						
Swaziland	34800	34.5	9.2	13.9	19.2 (15.9-23)	17.0 (13.9-20.4)	2.2 (1-4.6)	6,700 (5500-8000)	5,900 (4800-7100)	800 (300-1600)						
Syrian Arab Republic	465100	9.0	9.4	10.9	19.0 (13.9-25.5)	16.6 (11.9-22.8)	2.4 (1-5.3)	88,500 (64900-118400)	77,300 (55100-106200)	11,300 (4700-24700)						
Tajikistan	192000	25.4	6.6	10.7	17.0 (12.1-23.9)	14.7 (10-21)	2.4 (1-4.8)	32,700 (23200-45800)	28,100 (19200-40400)	4,600 (1900-9200)						

Country	Birth Prevalence (per 100 live births) in 2010								Number of Live Births 2010					
	Live births 2010 ¹	NMR 2010 ²	LBW ³	Preterm Birth ⁴	SGA (UR)	TSGA (UR)	PSGA (UR)	SGA (UR)	TSGA (UR)	PSGA (UR)				
Thailand	838300	7.9	9.2	12.0	18.8 (13.7-25.2)	16.1 (11.4-22.3)	2.7 (1.8-3.7)	157,700 (114900-210900)	135,300 (95900-186900)	22,500 (15200-31000)				
Timor-Leste	43700	24.8	12.0	12.1	26.3 (21.2-32.8)	23.6 (18.7-29.6)	2.7 (1.2-5.9)	11,500 (9300-14300)	10,300 (8200-12900)	1,200 (500-2600)				
Togo	193400	36.1	11.5	13.3	22.8 (19.2-26.5)	20.6 (17.3-23.9)	2.1 (0.9-4.6)	44,100 (37200-51300)	39,900 (33400-46200)	4,100 (1700-8800)				
Tonga	2800	8.0	3.0	7.5	7.5 (4.4-12.6)	5.9 (3-10.9)	1.6 (0.7-3.4)	200 (100-400)	200 (100-300)	45 (19-97)				
Trinidad and Tobago	19800	18.6	10.2	8.1	16.5 (12.9-20.7)	14.9 (11.1-19)	1.7 (1.1-3)	3,300 (2600-4100)	2,900 (2200-3800)	300 (200-600)				
Tunisia	179500	10.0	5.4	8.9	9.6 (6.6-13.2)	8.1 (5.4-11.7)	1.4 (0.7-2.6)	17,200 (11800-23800)	14,600 (9700-20900)	2,600 (1300-4700)				
Turkey	1.30E+06	9.5	11.0	12.0	21.7 (16.4-28.1)	19.0 (14.1-25.1)	2.7 (1.6-4.1)	281,300 (213000-364800)	246,600 (182700-326300)	34,600 (21400-53400)				
Turkmenistan	109000	22.0	5.1	9.8	13.5 (8.9-19.9)	11.3 (7-17.4)	2.2 (0.9-4.6)	14,700 (9700-21600)	12,300 (7700-18900)	2,400 (1000-5000)				
Uganda	1.50E+06	28.3	14.0	13.6	24.5 (20.3-28.7)	22.3 (18.4-26.2)	2.2 (1.2-4.2)	370,900 (304800-430100)	337,900 (276000-393600)	33,000 (17500-62600)				
United Arab Emirates	91500	4.2	3.2	7.6	7.7 (4.5-12.6)	6.0 (3.1-11)	1.7 (1-2.4)	7,100 (4100-11600)	5,500 (2900-10100)	1,500 (900-2200)				
United Republic of Tanzania	1.90E+06	26.0	9.5	11.4	17.8 (14.1-21.3)	15.9 (12.5-19)	1.8 (0.7-3.8)	331,200 (267300-405400)	297,000 (237700-361600)	34,200 (14100-73000)				
Uruguay	49800	5.7	9.3	10.1	14.0 (10.5-18.3)	11.9 (8.4-16.1)	2.1 (1.9-2.4)	7,000 (5200-9100)	5,900 (4200-8000)	1,000 (900-1200)				
Uzbekistan	587100	15.2	5.0	8.7	12.2 (8-18.2)	10.3 (6.3-16.2)	1.9 (1-3.7)	71,800 (47000-107000)	60,400 (37100-95300)	11,400 (6100-21700)				
Vanuatu	7100	7.0	10.2	12.9	20.2 (14.8-27)	17.4 (12.5-23.6)	2.8 (1.2-6.2)	1,400 (1000-1900)	1,200 (900-1700)	200 (100-400)				
Venezuela	263100	8.7	8.2	9.0	12.9 (11.3-19.7)	11.0 (7.8-15)	1.9 (2.6-6.5)	34,000 (29800-51800)	29,100 (20500-39400)	4,900 (6800-17000)				
Viet Nam	1.50E+06	12.3	5.3	9.4	12.6 (8.2-18)	10.5 (6.4-16)	2.1 (0.8-4.2)	184,800 (122500-270700)	153,900 (95600-240700)	30,800 (12400-63600)				
Yemen	919400	32.4	23.0	13.2	42.3 (37.6-48.3)	39.4 (35.1-44.8)	2.9 (1.1-6.1)	389,200 (345900-444200)	362,200 (322900-412300)	27,000 (10300-56300)				
Zambia	599600	28.2	11.0	12.9	20.5 (16.9-24.6)	18.4 (15-21.9)	2.1 (0.8-4.5)	122,900 (101500-147700)	110,400 (89700-131500)	12,500 (5100-26900)				
Zimbabwe	373900	30.0	11.4	16.6	22.0 (18.3-25.4)	19.3 (15.8-22.8)	2.7 (1.7-3.7)	82,100 (68500-95100)	72,200 (59200-85400)	9,900 (6200-14000)				

ABBREVIATIONS

NMR = Neonatal mortality rate (per 1000 live births)

LBW = Low birthweight (<2500g)

SGA = Small for gestational age (<10% gender specific birth weight for gestational age completed in weeks compared to US 1991 reference population- Alexander et al, Obstet Gynecol 1996; 87(2): 163-8)

TSGA = Term (gestational age ≥37 weeks) and Small for Gestational Age

PSGA = Preterm (gestational age <37 weeks) and Small for Gestational Age

UR = Uncertainty Range

DATA SOURCES

1: Live births: SOWC 2011; <http://www.unicef.org/sowc2011/statistics.php>

2: UN IGME: <http://www.childmortality.org/> (9/2012 update)

3: Data Sources and Methods referenced in web-appendix 8

4: Born too Soon Report: Howson, C.P.; Kinney, M.V.; Lawn, J.E. (Editors). Born too soon: the global action report on preterm birth. World Health Organization, Geneva, Switzerland (2012) 126 pp. ISBN 978 92 4 150343 3 and Blencowe H, Cousens S, Oestergaard MZ, et al. National, regional, and worldwide estimates of preterm birth rates in the year 2010 with time trends since 1990 for selected countries: a systematic analysis and implications. Lancet 2012; 379(9832): 2162-72

Web Appendix References

1. Christian P, Klemm R, Shamim AA, et al. Effects of vitamin A and beta-carotene supplementation on birth size and length of gestation in rural Bangladesh: a cluster-randomized trial. *The American Journal of Clinical Nutrition* 2013;97:188-94.
2. Baqui AH, El-Arifeen S, Darmstadt GL, et al. Effect of community-based newborn-care intervention package implemented through two service-delivery strategies in Sylhet district, Bangladesh: a cluster-randomised controlled trial. *Lancet* 2008;371:1936-44.
3. Rahmathullah L, Tielsch JM, Thulasiraj RD, et al. Impact of supplementing newborn infants with vitamin A on early infant mortality: community based randomised trial in southern India. *BMJ* 2003;327:254.
4. Christian P, West KP, Khatri SK, et al. Effects of maternal micronutrient supplementation on fetal loss and infant mortality: a cluster-randomized trial in Nepal. *The American Journal of Clinical Nutrition* 2003;78:1194-202.
5. Osrin D, Vaidya A, Shrestha Y, et al. Effects of antenatal multiple micronutrient supplementation on birthweight and gestational duration in Nepal: double-blind, randomised controlled trial. *Lancet* 2005;365:955-62.
6. Tielsch JM, Darmstadt GL, Mullany LC, et al. Impact of newborn skin-cleansing with chlorhexidine on neonatal mortality in southern Nepal: a community-based, cluster-randomized trial. *Pediatrics* 2007;119:e330-40.
7. Bhutta ZA, Rizvi A, Raza F, et al. A comparative evaluation of multiple micronutrient and iron-folic acid supplementation during pregnancy in Pakistan: impact on pregnancy outcomes. *Food and Nutrition Bulletin* 2009;30:S496-505.
8. Adair LS. Low birth weight and intrauterine growth retardation in Filipino infants. *Pediatrics* 1989;84:613-22.
9. Isaranurug S, Mo-suwan L, Choprapawon C. A population-based cohort study of effect of maternal risk factors on low birthweight in Thailand. *J Med Assoc Thai* 2007;90:2559-64.
10. Roberfroid D, Huybregts L, Lanou H, et al. Effects of maternal multiple micronutrient supplementation on fetal growth: a double-blind randomized controlled trial in rural Burkina Faso. *Am J Clin Nutr* 2008;88:1330-40.
11. Huybregts L, Roberfroid D, Lanou H, et al. Prenatal food supplementation fortified with multiple micronutrients increases birth length: a randomized controlled trial in rural Burkina Faso. *The American Journal of Clinical Nutrition* 2009;90:1593-600.
12. ter Kuile FO, Terlouw DJ, Kariuki SK, et al. Impact of permethrin-treated bed nets on malaria, anemia, and growth in infants in an area of intense perennial malaria transmission in western Kenya. *The American Journal of Tropical Medicine and Hygiene* 2003;68:68-77.
13. Bland R, Coovadia H, Coutsoodis A, Rollins N, Newell M. Cohort profile: Management of the Africa Center vertical transmission study. *International Journal of Epidemiology* 2010;39:351-60.
14. Fawzi WW, Msamanga GI, Urassa W, et al. Vitamins and perinatal outcomes among HIV-negative women in Tanzania. *The New England Journal of Medicine* 2007;356:1423-31.
15. Schmiegelow C, Minja D, Oesterholt M, et al. Factors associated with and causes of perinatal mortality in northeastern Tanzania. *Acta obstetrica et gynecologica Scandinavica* 2012;91:1061-8.
16. Ndyomugenyi R, Clarke SE, Hutchison CL, Hansen KS, Magnussen P. Efficacy of malaria prevention during pregnancy in an area of low and unstable transmission: an individually-randomised placebo-controlled trial using intermittent preventive treatment and insecticide-treated nets in the Kabale Highlands, southwestern Uganda. *Transactions of the Royal Society of Tropical Medicine and Hygiene* 2011;105:607-16.
17. Victora CG, Barros FC. Cohort profile: the 1982 Pelotas (Brazil) birth cohort study. *International Journal of Epidemiology* 2006;35:237-42.
18. Victora CG, Hallal PC, Araujo CL, Menezes AM, Wells JC, Barros FC. Cohort profile: the 1993 Pelotas (Brazil) birth cohort study. *International Journal of Epidemiology* 2008;37:704-9.
19. Santos IS, Barros AJ, Matijasevich A, Domingues MR, Barros FC, Victora CG. Cohort profile: the 2004 Pelotas (Brazil) birth cohort study. *Int J Epidemiol* 2011;40:1461-8.
20. Gonzalez R, Meriardi M, Lincetto O, et al. Reduction in neonatal mortality in Chile between 1990 and 2000. *Pediatrics* 2006;117:e949-54.
21. Caulfield LE, Zavaleta N, Figueroa A, Leon Z. Maternal zinc supplementation does not affect size at birth or pregnancy duration in Peru. *The Journal of Nutrition* 1999;129:1563-8.
22. Alexander GR, Himes JH, Kaufman RB, Mor J, Kogan M. A United States national reference for fetal growth. *Obstetrics and Gynecology* 1996;87:163-8.
23. Zhou LM, Yang WW, Hua JZ, Deng CQ, Tao X, Stoltzfus RJ. Relation of hemoglobin measured at different times in pregnancy to preterm birth and low birth weight in Shanghai, China. *American Journal of Epidemiology* 1998;148:998-1006.
24. Eneroth H, El Arifeen S, Persson LA, et al. Duration of exclusive breast-feeding and infant iron and zinc status in rural Bangladesh. *The Journal of Nutrition* 2009;139:1562-7.

25. Zeng L, Yan H, Cheng Y, Dibley MJ. Modifying effects of wealth on the response to nutrient supplementation in pregnancy on birth weight, duration of gestation and perinatal mortality in rural western China: double-blind cluster randomized controlled trial. *International Journal of Epidemiology* 2011;40:350-62.
26. Sebayang SK, Dibley MJ, Kelly P, Shankar AV, Shankar AH. Modifying effect of maternal nutritional status on the impact of maternal multiple micronutrient supplementation on birthweight in Indonesia. *European Journal of Clinical Nutrition* 2011;65:1110-7.
27. Osendarp SJ, van Raaij JM, Arifeen SE, Wahed M, Baqui AH, Fuchs GJ. A randomized, placebo-controlled trial of the effect of zinc supplementation during pregnancy on pregnancy outcome in Bangladeshi urban poor. *The American Journal of Clinical Nutrition* 2000;71:114-9.
28. Arifeen SE, Black RE, Caulfield LE, Antelman G, Baqui AH. Determinants of infant growth in the slums of Dhaka: size and maturity at birth, breastfeeding and morbidity. *European Journal of Clinical Nutrition* 2001;55:167-78.
29. Shah A, Faundes A, Machoki M, et al. Methodological considerations in implementing the WHO Global Survey for Monitoring Maternal and Perinatal Health. *Bulletin of the World Health Organization* 2008;86:126-31.
30. Inter-agency Group for Child Mortality Estimation (IGME). (Accessed October 13, 2012, at http://www.childinfo.org/mortality_igme.html.)
31. UNICEF. *State of the World's Children 2010*. New York; 2010.
32. Katz J, Lee AC, Kozuki N, Lawn J, Cousens S, Blencowe H, Ezzati M, Bhutta Z, et al. Born too small or too soon: a pooled analysis of mortality risk among preterm and small-for-gestational-age infants in low- and middle-income countries. *Lancet* 2013.
33. Blencowe H, Cousens S, Oestergaard MZ, et al. National, regional, and worldwide estimates of preterm birth rates in the year 2010 with time trends since 1990 for selected countries: a systematic analysis and implications. *Lancet* 2012;379:2162-72.