

Table S1. Risk factors associated with preterm births

| | Non-preterm (≥ 37 wks) n=8993 | Preterm (<37 wks) n=981 | OR* (95% CI) | Adjusted OR (95% CI) |
|---|-------------------------------------|-------------------------------|-------------------|-------------------------|
| Maternal and household characteristics[‡] | | | | |
| Pregnant woman's age | | | | |
| 15-19 years | 1043 (89.3) | 125 (10.7) | 1.19 (0.97, 1.48) | 1.27 (1.03, 1.58) |
| 20-34 | 6041 (90.6) | 624 (9.4) | 1.0 (reference) | 1.0 (reference) |
| 35+ | 945 (92.8) | 74 (7.3) | 0.96 (0.74, 1.24) | 0.89 (0.69, 1.17) |
| Pregnant woman's education | | | | |
| No education | 1877 (87.6) | 265 (12.4) | 1.0 (reference) | 1.0 (reference) |
| 1-6 years | 2818 (91.2) | 273 (8.8) | 0.97 (0.70, 1.19) | 1.02 (0.81, 1.27) |
| 7-12 years | 3724 (91.5) | 345 (8.5) | 0.86 (0.71, 1.06) | 0.99 (0.79, 1.25) |
| 13+ years | 99 (94.3) | 6 (5.7) | 0.63 (0.27,1.47) | 0.97 (0.42, 2.32) |
| Wealth quintile | | | | |
| Poorest | 1617 (89.6%) | 187 (10.4%) | 1.39 (1.10, 1.73) | 1.36 (1.05, 1.77) |
| Poorer | 1661 (89.6%) | 193 (10.4%) | 1.39 (1.10, 1.74) | 1.36 (1.06, 1.75) |
| Middle | 1645 (89.8%) | 186 (10.2%) | 1.33 (1.06, 1.67) | 1.28 (1.00, 1.64) |
| Richer | 1649 (90.8%) | 168 (9.3%) | 1.19 (0.94, 1.50) | 1.16 (0.92, 1.49) |
| Richest | 1702 (92.1%) | 146 (7.9%) | 1.0 (reference) | 1.0 (reference) |
| Previous obstetric history^β | | | | |
| Previous stillbirth | | | | |
| No | 6065 (91) | 597 (9) | 1.0 (reference) | 1.0 (reference) |
| Yes | 581 (84.5) | 107 (15.6) | 1.87 (1.49, 2.35) | 1.84 (1.42, 2.37) |
| Previous preterm birth | | | | |
| No | 6443 (90.5) | 674 (9.5) | 1.0 (reference) | 1.0 (reference) |
| Yes | 125 (82.8) | 26 (17.2) | 1.93 (1.24, 3.00) | 1.96 (1.18, 3.26) |
| Morbidity during current pregnancy[€] | | | | |
| Antepartum haemorrhage | | | | |
| No | 7496 (91.0) | 743 (9.0) | 1.0 (reference) | 1.0 (reference) |
| Yes | 113 (87.6) | 16 (12.4) | 1.23 (0.72, 2.13) | 1.24 (0.66, 2.33) |
| Pre-eclampsia or eclampsia | | | | |
| No | 7475 (91.0) | 739 (9.0) | 1.0 (reference) | 1.0 (reference) |
| Yes | 127 (87.0) | 19 (13.01) | 2.36 (1.42, 3.91) | 2.74 (1.56, 4.84) |
| Fever before or during delivery | | | | |
| No | 6504 (91.7) | 587 (8.3) | 1.0 (reference) | 1.0 (reference) |
| Yes | 225 (83) | 46 (17) | 1.65 (1.12, 2.24) | 1.76 (1.18, 2.62) |
| Multiple birth | | | | |
| Singleton | 8861 (91.1) | 867 (8.9) | 1.0 (reference) | 1.0 (reference) |
| Multiple birth | 132 (53.7) | 114 (46.3) | 13.3 (10.0, 17.8) | 14.3 (9.92, 20.52) |

* The estimate was adjusted for site.

β The estimates were adjusted for the other factors on previous obstetric history, maternal age, maternal education, wealth quintile, and site.

€ Each maternal morbidity-outcome was analyzed in a separate logistic regression model. Each model was adjusted for maternal age, maternal education, wealth quintile, previous obstetric history and site.

Table S2. Risk factors associated with spontaneous preterm birth

| | Non-preterm (≥ 37 wks) n=7863 | Preterm (<37 wks) n=761 | OR* (95% CI) | Adjusted OR (95% CI) |
|---|-------------------------------------|-------------------------------|---------------------|-------------------------|
| Maternal and household characteristics[‡] | | | | |
| 1. Pregnant woman's age | | | | |
| 15-19 years | 916 (89.5) | 107 (10.5) | 1.33 (1.06, 1.67) | 1.41 (1.12, 1.78) |
| 20-34 | 5369 (91.6) | 490 (8.4) | 1.0 (reference) | 1.0 (reference) |
| 35+ | 858 (93.3) | 62 (6.7) | 1.01 (0.76, 1.34) | 0.94 (0.70, 1.26) |
| 2. Pregnant woman's education | | | | |
| No education | 1729 (88.7) | 220 (11.3) | 1.0 (reference) | 1.0 (reference) |
| 1-6 years | 2537 (91.8) | 228 (8.3) | 0.95 (0.75, 1.19) | 1.02(0.80, 1.30) |
| 7-12 years | 3211 (92.7) | 254 (7.3) | 0.81 (0.65, 1.02) | 0.98(0.75, 1.26) |
| 13+ years | 74 (93.7) | 5 (6.3) | 0.81 (0.32,2.05) | 1.39(0.53, 3.62) |
| 3. Wealth quintile | | | | |
| Poorest | 1519 (90.3%) | 164 (9.7%) | 1.55 (1.19, 2.03) | 1.52(1.13, 2.04) |
| Poorer | 1529 (90.1%) | 168 (9.9%) | 1.59 (1.22, 2.07) | 1.55(1.16, 2.06) |
| Middle | 1468 (90.8%) | 149 (9.2%) | 1.46 (1.11, 1.91) | 1.39(1.04, 1.85) |
| Richer | 1402 (91.9%) | 124 (8.1%) | 1.27 (0.96, 1.68) | 1.26(0.95, 1.69) |
| Richest | 1376 (93.6%) | 94 (6.4%) | 1.0 (reference) | 1.0 (reference) |
| Previous obstetric history^β | | | | |
| 1. Previous stillbirth | | | | |
| No | 5497 (91.9) | 483 (8.1) | 1.0 (reference) | 1.0 (reference) |
| Yes | 506 (86.1) | 82 (14.0) | 1.81 (1.40, 2.34) | 1.73(1.30, 2.30) |
| 2. Previous preterm birth | | | | |
| No | 5824 (91.5) | 541 (8.5) | 1.0 (reference) | 1.0 (reference) |
| Yes | 108 (84.4) | 20 (15.6) | 2.00 (1.22, 3.28) | 2.00(1.12, 3.55) |
| Morbidity during current pregnancy^ε | | | | |
| 1. Antepartum haemorrhage | | | | |
| No | 6692 (91.7) | 603 (8.3) | 1.0 (reference) | 1.0 (reference) |
| Yes | 101 (87.8) | 14 (12.2) | 1.35 (0.75, 2.40) | 1.42(0.73, 2.76) |
| 2. Pre-eclampsia or eclampsia | | | | |
| No | 6674 (91.7) | 605 (8.3) | 1.0 (reference) | 1.0 (reference) |
| Yes | 112 (89.6) | 13 (10.4) | 1.91 (1.05, 3.48) | 2.38(1.25, 4.52) |
| 3. Fever before or during delivery | | | | |
| No | 5956 (92.3) | 498 (7.7) | 1.0 (reference) | 1.0 (reference) |
| Yes | 200 (83.0) | 41 (17.0) | 1.90 (1.31, 2.75) | 2.11(1.39, 3.20) |
| 4. Multiple birth | | | | |
| Singleton | 7757 (91.9) | 681 (8.1) | 1.0 (reference) | 1.0 (reference) |
| Multiple birth | 106 (57.0) | 80 (43.0) | 12.38 (8.92, 17.19) | 13.42(9.03, 19.95) |

* The estimate was adjusted for site.

‡ The estimates were adjusted for all other maternal and household characteristics and site.

β The estimates were adjusted for the other factors on previous obstetric history, six maternal and household characteristics, and site.

€ Each maternal morbidity-outcome was analyzed in a separate logistic regression model. Each model was adjusted for maternal and household characteristics, previous obstetric history and site.