eAppendix to the manuscript “Antenatal uterotonics as a risk factor for intrapartum stillbirth and first-day death in Haryana, India: a nested case-control study” by Mohan/Sommerfelt *et al*.

eFigure. Alternative DAG to explore the set of potential confounders that could be observed prior to or during delivery, and that could drive either care seeking behavior or response by care providers. The open ovals depict the covariates in the alternative model described in the manuscript. The “Quality of care provider” variable is unobserved, and is included only to illustrate that residual confounding could potentially be present through some unknown quality of the care provider not fully represented by the variables “Place of delivery” and “Skilled birth attendant”.



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**eTABLE.** Antenatal administration of oxytocics, antenatal and intrapartum characteristics with their corresponding crude odds ratios (ORs) describing the association between early death versus late death in a nested case-control study in Haryana, India. The cases are intrapartum stillbirths and live-born babies who died within 24 hours of being born, the controls (late deaths) are neonates who died after their first week of life. The ORs are calculated from the non-missing values. Thus, antenatal oxytocic injections were recalled by mothers of 1,478 (74%) of the 1,997 (1478+519) cases and 199 (61.5%) of the 517 (318+199) controls, yielding a crude OR of (1,478/519)/(318/199) or 1.78. The 95% confidence intervals (95%CI) of the ORs were derived from logistic regression accounting for dependencies between individuals within each of the 18 population clusters.

|  |  |  |  |
| --- | --- | --- | --- |
|   | **Cases** | **Controls** |  |
|  | **n=2076** | **n=532** |  |
|  |  |  |
| **Variable** | **Number (%)** | **OR (95%CI)** |
|  |  |  |  |
| **Oxytocic injection** |  |  |
| Missing | 79 (3.8) | 15 (2.8) |  |
| No | 519 (25) | 199 (37) | 1 |
| Yes | 1478 (71) | 318 (60) | 1.8 (1.5, 2.1) |
| **Place of delivery** |  |  |  |
| Missing | 2 (0.10) | 1 (0.19) |  |
| Government facility | 292 (14) | 70 (13) | 1 |
| Private health facility | 830 (40) | 169 (32) | 1.2 (0.84, 1.6) |
| Home, including 13 in transport | 952 (46) | 292 (55) | 0.78 (0.56, 1.1) |
|  |  |  |  |
| **Skilled birth attendant**  |  |  |  |
| Missing (%) | 0 (0) | 0 (0) |  |
| No  | 863 (42) | 261 (49) | 1 |
| Yes | 1213 (58) | 271 (51) | 1.4 (1.1, 1.7) |
|  |  |  |  |
| **Maternal age**  |  |  |  |
| Missing | 0 (0) | 0 (0) |  |
| <20years | 281 (14) | 70 (13) | 1.0 (0.79, 1.3) |
| 20, <35 years  | 1693 (82) | 429 (81) | 1 |
| > 35 years | 102 (4.9) | 33 (6.2) | 0.78 (0.55, 1.1) |
| **Parity**  |  |  |  |
| Missing | 10 (0.48) | 2 (0.38) |  |
| Multiparous | 1300 (63) | 378 (71) | 1 |
| Nulliparous | 766 (37) | 152 (29) | 1.5 (1.2, 1.7) |
| **Multiples** |  |  |  |
| Missing | 10 (0.48) | 2 (0.38) |  |
| Singleton | 1946 (94) | 484 (91) | 1 |
| Twin or triplet | 120 (5.8) | 46 (8.6) | 0.65 (0.46, 0.91) |
| **Antenatal care**  |  |  |  |
| Missing | 11 (0.53) | 3 (0.56) |  |
| No | 796 (38) | 238 (45) | 1 |
| Yes | 1269 (61) | 291 (55) | 1.3 (1.1, 1.5) |
| **Fever on the day delivery began** |  |
| Missing | 11 (0.53) | 2 (0.38) |  |
| No | 1888 (91) | 497 (93) | **1** |
| Yes | 177 (8.5) | 33 (6.2) | 1.4 (1.1, 1.9) |
| **Antepartum hemorrhage** |  |  |
| Missing | 0 (0) | 0 (0) |  |
| No | 1805 (87) | 478 (90) | **1** |
| Yes  | 271 (13) | 54 (10) | 1.3 (0.90, 2.0) |
| **Prolonged Labour (≥12 hours in multiparous, ≥ 24 hours in primiparous)** |  |  |
| Missing | 10 (0.48) | 2 (0.38) |  |
| No | 1707 (82) | 448 (84) | 1 |
| Yes | 359 (17) | 82 (15) | 1.2 (0.82, 1.6) |
| **Foul-smelling amniotic fluid** |  |
| Missing (%)r | 37 (1.8) | 6 (1.1) |  |
| No | 1943 (94) | 504 (95) | **1** |
| Yes | 96 (4.6) | 22 (4.1) | 1.1 (0.78, 1.6) |
|  |
| **PROM (Prolonged rupture of membranes)** |  |  |  |
| Missing (%) | 21 (1.0) | 6 (1.1) |  |
| No | 1844 (89) | 476 (90) | 1 |
| Yes | 211 (10) | 50 (9.4) | 1.1 (0.82, 1.5) |
| **Cord prolapse** |  |  |  |
| Missing (%) | 34 (1.6) | 5 (0.94) |  |
| No | 2013 (97) | 524 (98) | 1 |
| Yes | 29 (1.4) | 3 (0.56) | 2.5 (0.88, 7.2) |
| **Presentation** |  |
| Missing (%) | 136 (6.5) | 21 (3.9) |  |
| Vertex | 1617 (78) | 475 (89) | 1 |
| Malpresentation | 323 (16) | 36 (6.8) | 2.6 (1.8, 3.8) |
| **Type of delivery** |  |  |  |
| Missing (%) | 10 (0.48) | 2 (0.38) |  |
| Spontaneous vaginal delivery | 1853 (89) | 494 (93) | 1 |
| Assisted delivery | 213 (10) | 36 (6.8) | 1.6 (1.2, 2.1) |
| **Sex assigned at birth** |  |  |
| Missing (%) | 15 (0.72) | 3 (0.56) |  |
| Girl | 930 (45) | 269 (51) | 1 |
| Boy | 1131 (54) | 260 (49) | 1.3 (1.1, 1.5) |
|  |  |  |  |
| **Preterm birth** |  |  |  |
| Missing (%) | 10 (0.48) | 2 (0.38) |  |
| Term or post term | 1908 (92) | 503 (95) | 1 |
| Preterm (< 7 months) | 158 (7.6) | 27 (5.1) | 1.54 (1.0, 2.3) |
| **CNS malformation** |  |  |  |
| Missing (%) | 10 (0.48) | 2 (0.38) |  |
| No | 1968 (95) | 507 (95) | 1 |
| Yes | 98 (4.7) | 23 (4.3) | 1.1 (0.70, 1.7) |

OR=1 denotes reference category

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