Epidemiology and Infection

Timing and Predictors of Severe Rotavirus Gastroenteritis among Unvaccinated Infants in Low- and Middle-Income Countries

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Supplemental Material

Supplementary Table S1. Predictors of first severe rotavirus gastroenteritis episode in cohort two with and without Kenya and Mali included.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Characteristic | Cohort 2\*  N = 3,746 Events = 205 | | Cohort 2 without Kenya & Mali  N = 2,120 Events = 129 | |
| Unadjusted†  HR (95% CI) | Adjusted†  HR (95% CI) | Unadjusted†  HR (95% CI) | Adjusted†  HR (95% CI) |
| Demographic |  |  |  |  |
| Female Sex vs. Male (ref) | 0.86 (0.65, 1.13) | 0.86 (0.65, 1.13) | 0.68 (0.48, 0.97) | 0.69 (0.49, 0.98) |
| Exclusively Breastfed vs. Not (ref) | 0.75 (0.48, 1.15) | 0.75 (0.48, 1.16) | 0.95 (0.50, 1.79) | 0.99 (0.52, 1.87) |
| Growth Status |  |  |  |  |
| Stunted vs. Not (ref) | -- | -- | -- | -- |
| Underweight vs. Not (ref) | 0.82 (0.52, 1.30) | 0.81 (0.51, 1.29) | 0.98 (0.59, 1.63) | 0.95 (0.57, 1.58) |
| Wasting vs. Not (ref) | -- | -- | -- | -- |
| Current/Prior Infection vs. None (ref) | 0.99 (0.64, 1.52) | 0.89 (0.56, 1.40) | 1.11 (0.70, 1.77) | 0.98 (0.60, 1.60) |
| Current/Prior Antibiotic‖ Use vs. None (ref) | 1.40 (0.81, 2.41) | 1.41 (0.80, 2.51) | 1.71 (0.97, 3.03) | 1.66 (0.92, 3.01) |
| Routine Vaccines |  |  |  |  |
| BCG§; No Dose vs. ≥ 1 Dose (ref) | 0.63 (0.34, 1.17) | 0.65 (0.35, 1.21) | 0.67 (0.31, 1.42) | 0.64 (0.29, 1.38) |
| DTP-HB/HIB¶; No Dose vs. ≥ 1 Dose (ref) | 1.00 (0.71, 1.42) | 1.08 (0.71, 1.66) | 1.18 (0.72, 1.93) | 1.11 (0.65, 1.90) |
| OPV; ≤ 1 Dose vs. ≥ 2 Doses (ref) | 0.94 (0.70, 1.25) | 0.95 (0.66, 1.36) | 1.15 (0.80, 1.67) | 1.17 (0.78, 1.76) |

\* Six infants from cohort two entered and exited the study before six weeks of age

† Adjusted for country

‡ Less than ten events in each strata

§ Excluding topical antibiotics

‖ Administered prior to enrollment

¶ Or DTaP & HB, which were the standard vaccines given in Asian countries

BCG, Bacillus Calmette–Guérin vaccine; DTP-HB/HIB, diphtheria-tetanus-pertussis-Hepatitis B and -Haemophilus influenza B vaccines; DTaP, diphtheria and tetanus toxoids and acellular pertussis vaccine; HB, Hepatitis B vaccine; OPV, oral polio vaccine

There were differential patterns in lost to follow-up within some strata of factors in cohort one (Supplementary Table S2). There were more infants lost to follow-up who were stunted versus not and those with one or fewer doses of OPV versus at least two doses at enrollment.

Supplementary Table S2. Distribution of characteristics by follow-up status.

|  |  |  |
| --- | --- | --- |
| Characteristic | Infants with Complete Follow-Up, N (%) | Infants Lost to Follow-up, N (%) |
| Female Sex (vs. Male) | 655 (49) | 128 (46) |
| Growth Status |  |  |
| Stunted (vs. Not) | 279 (21) | 77 (27) |
| Underweight (vs. Not) | 57 (4) | 16 (6) |
| Wasting (vs. Not) | 54 (4) | 13 (5) |
| Current/Prior Infection (vs. None) | 48 (4) | 19 (7) |
| Current/Prior Antibiotic Use (vs. None) | 117 (9) | 31 (11) |
| Routine Vaccination |  |  |
| No BCG (vs. ≥ 1 Dose) | 57 (4) | 21 (7) |
| No DTP-HB/HIB (vs. ≥ 1 Dose) | 1,330 (100) | 280 (100) |
| ≤ 1 Dose OPV (vs. ≥ 2 Doses) | 138 (10) | 52 (19) |

BCG, Bacillus Calmette–Guérin; DTP-HB/HIB, diphtheria-tetanus-pertussis-Hepatitis B and -Haemophilus influenza B vaccines; DTaP, diphtheria and tetanus toxoids and acellular pertussis vaccine; OPV, oral polio vaccine