Supplementary Appendix

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Supplementary Table 1.**  **Comparison of characteristics of 189 children who completed and 102 children who did not complete 24 months of follow-up** | | | | |
|  | Did not complete | | Completed | |
|  | n = 102 | | N = 189 | |
| Mean birth weight ± SD (g) | 3204 ± 427 | | 3320 ± 476 | |
| Median Mother's age, [25th-75th % range] | 24 [21—28] | | 26 [21—31] | |
|  | n | % | n | % |
| Gender of the child Male | 48 | 47.1 | 94 | 49.7 |
| Female | 54 | 52.9 | 95 | 50.3 |
| Mother's education No schooling | 4 | 3.9 | 10 | 5.3 |
| Primary | 27 | 26.5 | 47 | 25.1 |
| Secondary | 50 | 49.0 | 105 | 56.1 |
| > Secondary | 21 | 20.6 | 25 | 13.4 |
| Exclusive breast fed in 3-6 months old |  |  |  |  |
| > 50% of days | 10\* | 32.3 | 83 | 43.9 |
| < 50% of days | 12\* | 67.7 | 106 | 56.1 |
| Water source |  |  |  |  |
| Indoor connection for 24hrs | 93 | 91.2 | 166 | 87.8 |
| Indoor connection < 24hrs | 0 | 0.0 | 2 | 1.1 |
| Outdoor connection | 0 | 0.0 | 4 | 2.1 |
| Sharing with others | 3 | 2·9 | 7 | 3.7 |
| Public connection | 6 | 5·9 | 10 | 5.3 |
| Cost for water/month 11-20 USD | 89 | 88.1 | 172 | 91.0 |
| 21-30 USD | 11 | 10.9 | 15 | 7.9 |
| 31-40 USD | 1 | 1.0 | 2 | 1.1 |
| Waste 　Indoor flush toilet | 95 | 93.1 | 169 | 89.4 |
| Outdoor flush toilet | 2 | 2.0 | 8 | 4.2 |
| Latrine (personal) | 2 | 2.0 | 1 | 0.5 |
| Latrine (shared) | 1 | 1.0 | 0 | 0.0 |
| Open air defecation | 2 | 2.0 | 11 | 5.8 |
| Having electricity Yes | 102 | 100.0 | 184 | 97.4 |
| No | 0 | 0.0 | 5 | 2.6 |
| Having refrigerator Yes | 50 | 49.0 | 9 | 47.6 |
| No | 52 | 51.0 | 8 | 52.4 |
| Having animal in household Yes | 63 | 61.8 | 131 | 69.3 |
| No | 39 | 38.2 | 58 | 30.7 |
| Household income (Monthly) |  |  |  |  |
| 51-150 USD | 24 | 23.8 | 39 | 21.1 |
| 151-250 USD | 58 | 57.4 | 122 | 66.0 |
| > 251USD | 19 | 18. | 24 | 13.0 |
|  |  |  |  |  |

\*There was no significant difference in distribution of these characteristics in the two groups of children ( *p* values > 0.05).

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Supplementary Table 2.** | | | | | | | |
| **Distribution of norovirus genotypes and variants of genogroup II, type 4 among**  **347 infections from new-born cohort children** | | | | | | | |
| Genogroup I | | | | Genogroup II | | | |
| Genotype | n | % |  | Genotype | Variant | n | % |
| GI.2 | 6 | 1.7 |  | GII.2 |  | 2 | 0.6 |
| GI.3 | 10 | 2.8 |  | GII.3 |  | 27 | 7.7 |
| GI.4 | 5 | 1.4 |  | GII.4 | 2006b | 77 | 21.9 |
| GI.5 | 14 | 4.0 |  | GII.4 | 2007 | 52 | 14.8 |
| GI.7 | 18 | 5.1 |  | GII.4 | 2008 | 11 | 3.1 |
| GI.8 | 10 | 2.8 |  | GII.4 | 2010 | 1 | 0.3 |
|  |  |  |  | GII.5 |  | 4 | 1.1 |
|  |  |  |  | GII.6 |  | 53 | 15.1 |
|  |  |  |  | GII.7 |  | 1 | 0.3 |
|  |  |  |  | GII.9 |  | 6 | 1.·7 |
|  |  |  |  | GII.12 |  | 9 | 2.6 |
|  |  |  |  | GII.14 |  | 13 | 3.7 |
|  |  |  |  | GII.15 |  | 1 | 0.3 |
|  |  |  |  | GII.17 |  | 23 | 6.6 |
|  |  |  |  | GII.22 |  | 1 | 0.3 |
|  |  |  |  | Undefined |  | 7 | 2.0 |
|  | | | | | | | |

Capsid C region genotyping was performed in 769 samples from 440 infections (of a total of 607 infections). The complementary DNA fragments were successfully amplified from 573 samples (359 infections) and of those, 535 samples (347 infections) were sequenced. There were four mixed infection episodes containing two genotypes each, hence the table total is 351. Four children had repeated norovirus infections with GI.5, GII.6, GII.4 variant 2006b and variant 2007. The intervals (in days) between the repeated infections were 86, 185, 222 and 584 days, respectively. The median interval between infections caused by different genotypes or GII.4 variants was 115 days (inter-quartile range (IQR): 64—205 days).

Supplementary Figure 1

Distribution of the threshold Cycle (Ct) Value of real-time RT PCR among the non-diarrhea and diarrhea norovirus positive samples by genogroups (Left: Norovirus group I (GI); Right: group II (GII)).

C:\Users\jon\AppData\Local\Temp\Figure_Supplementary1_Ct value-1.tif