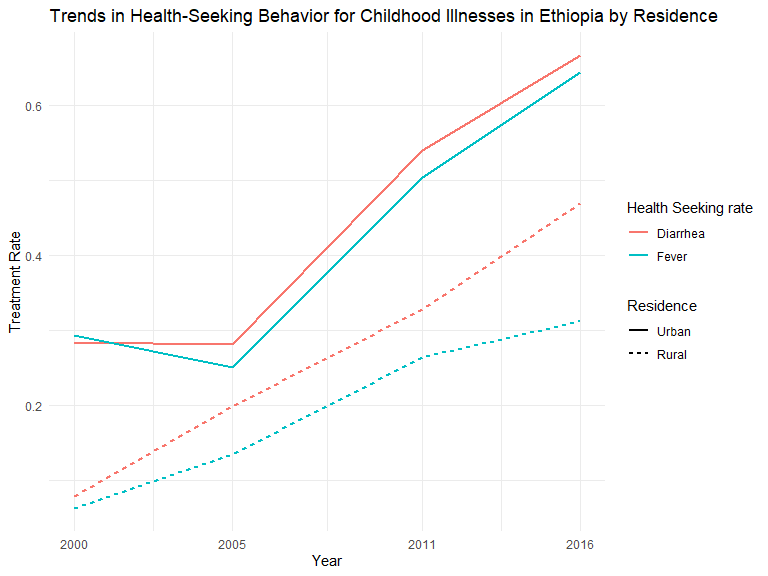
**Trend Analysis from 2000 to 2016**



**Descriptive for diarrhea**

| **Characteristic** | **No treatment**, N = 4281 | **Treatment received**, N = 4681 | **p-value**2 |
| --- | --- | --- | --- |
| childsex |  |  | 0.4029 |
| male | 236 (55%) | 245 (52%) |  |
| female | 192 (45%) | 223 (48%) |  |
| educlevel |  |  | 0.0000 |
| no education | 291 (68%) | 234 (50%) |  |
| primary | 104 (24%) | 174 (37%) |  |
| secondary | 28 (6.5%) | 35 (7.5%) |  |
| higher | 5 (1.2%) | 25 (5.3%) |  |
| marital\_status |  |  | 0.1437 |
| single | 13 (3.0%) | 6 (1.3%) |  |
| married | 393 (92%) | 441 (94%) |  |
| widowed | 7 (1.6%) | 3 (0.6%) |  |
| divorced | 15 (3.5%) | 18 (3.8%) |  |
| windex |  |  | 0.0000 |
| poorest | 160 (37%) | 116 (25%) |  |
| poorer | 85 (20%) | 71 (15%) |  |
| middle | 67 (16%) | 79 (17%) |  |
| richer | 58 (14%) | 78 (17%) |  |
| richest | 58 (14%) | 124 (26%) |  |
| residence |  |  | 0.0000 |
| urban | 55 (13%) | 112 (24%) |  |
| rural | 373 (87%) | 356 (76%) |  |
| health\_insurance | 8 (1.9%) | 25 (5.3%) | 0.0058 |
| hfdistance |  |  | 0.0006 |
| big problem | 254 (59%) | 224 (48%) |  |
| not a big problem | 174 (41%) | 244 (52%) |  |
| agegroups |  |  | 0.3745 |
| 15-24 | 107 (25%) | 140 (30%) |  |
| 25-34 | 228 (53%) | 239 (51%) |  |
| 35-44 | 87 (20%) | 82 (18%) |  |
| >45 | 6 (1.4%) | 7 (1.5%) |  |
| region |  |  | 0.0979 |
| tigray | 54 (13%) | 55 (12%) |  |
| afar | 43 (10%) | 45 (9.6%) |  |
| amhara | 58 (14%) | 44 (9.4%) |  |
| oromia | 74 (17%) | 64 (14%) |  |
| somali | 32 (7.5%) | 31 (6.6%) |  |
| benishangul | 27 (6.3%) | 38 (8.1%) |  |
| snnpr | 69 (16%) | 72 (15%) |  |
| gambela | 31 (7.2%) | 44 (9.4%) |  |
| harari | 16 (3.7%) | 27 (5.8%) |  |
| addis adaba | 8 (1.9%) | 18 (3.8%) |  |
| dire dawa | 16 (3.7%) | 30 (6.4%) |  |
| religion |  |  | 0.2649 |
| orthodox | 136 (32%) | 155 (33%) |  |
| catholic | 2 (0.5%) | 5 (1.1%) |  |
| protestant | 95 (22%) | 98 (21%) |  |
| muslin | 184 (43%) | 207 (44%) |  |
| traditional | 7 (1.6%) | 2 (0.4%) |  |
| other | 4 (0.9%) | 1 (0.2%) |  |
| hhhead\_sex |  |  | 0.7745 |
| male | 348 (81%) | 377 (81%) |  |
| female | 80 (19%) | 91 (19%) |  |
| pdelivery1 |  |  | 0.0000 |
| health fasility | 131 (31%) | 227 (49%) |  |
| home | 291 (68%) | 234 (50%) |  |
| other | 6 (1.4%) | 7 (1.5%) |  |
| u5children\_group |  |  | 0.2502 |
| 1 U5 child | 189 (44%) | 232 (50%) |  |
| 2 U5children | 186 (43%) | 187 (40%) |  |
| 3 or more U5children | 53 (12%) | 49 (10%) |  |
| num\_hhs\_group |  |  | 0.0128 |
| < 5 members | 197 (46%) | 261 (56%) |  |
| 6 to 10 members | 220 (51%) | 195 (42%) |  |
| above 10 members | 11 (2.6%) | 12 (2.6%) |  |
| childage\_group |  |  | 0.0099 |
| 0-10 months | 122 (29%) | 112 (24%) |  |
| 11-20 months | 126 (29%) | 169 (36%) |  |
| 21-30 months | 77 (18%) | 105 (22%) |  |
| 31-40 months | 56 (13%) | 50 (11%) |  |
| 41-50 months | 25 (5.8%) | 23 (4.9%) |  |
| 51-59 months | 22 (5.1%) | 9 (1.9%) |  |
| ancvisit |  |  | 0.0000 |
| no visit | 161 (38%) | 97 (21%) |  |
| less than 4 | 135 (32%) | 144 (31%) |  |
| 4 and above | 132 (31%) | 227 (49%) |  |
| 1n (%) | | | |
| 2Pearson's Chi-squared test; Fisher's exact test | | | |

**Model for diarrhea**

| Dependent: diarriatreat |  | OR (univariable) | OR (multivariable) |
| --- | --- | --- | --- |
| educlevel | no education | - | - |
|  | primary | 2.08 (1.55-2.81, p<0.001) | 1.61 (1.16-2.25, p=0.005) |
|  | secondary | 1.55 (0.92-2.65, p=0.100) | 0.78 (0.43-1.44, p=0.428) |
|  | higher | 6.22 (2.54-18.64, p<0.001) | 2.58 (0.95-8.34, p=0.081) |
| marital\_status | single | - | - |
|  | married | 2.43 (0.95-6.98, p=0.075) | 3.15 (1.14-9.65, p=0.033) |
|  | widowed | 0.93 (0.16-4.78, p=0.930) | 0.96 (0.15-5.54, p=0.968) |
|  | divorced | 2.60 (0.82-8.99, p=0.114) | 3.03 (0.87-11.44, p=0.089) |
| windex | poorest | - | - |
|  | poorer | 1.15 (0.78-1.71, p=0.483) | 0.98 (0.64-1.48, p=0.908) |
|  | middle | 1.63 (1.09-2.44, p=0.018) | 1.28 (0.83-1.98, p=0.262) |
|  | richer | 1.85 (1.23-2.82, p=0.004) | 1.41 (0.89-2.24, p=0.140) |
|  | richest | 2.95 (2.00-4.39, p<0.001) | 1.51 (0.82-2.79, p=0.187) |
| residence | urban | - | - |
|  | rural | 0.47 (0.33-0.66, p<0.001) | 0.95 (0.54-1.69, p=0.862) |
| health\_insurance | no | - | - |
|  | yes | 2.96 (1.38-7.09, p=0.008) | 2.13 (0.92-5.41, p=0.089) |
| hfdistance | big problem | - | - |
|  | not a big problem | 1.59 (1.22-2.07, p=0.001) | 1.15 (0.85-1.56, p=0.363) |
| pdelivery1 | health fasility | - | - |
|  | home | 0.46 (0.35-0.61, p<0.001) | 0.82 (0.57-1.18, p=0.290) |
|  | other | 0.67 (0.22-2.13, p=0.485) | 0.74 (0.22-2.57, p=0.630) |
| u5children\_group | 1 U5 child | - | - |
|  | 2 U5children | 0.82 (0.62-1.08, p=0.161) | 0.95 (0.69-1.32, p=0.752) |
|  | 3 or more U5children | 0.75 (0.49-1.16, p=0.200) | 1.13 (0.67-1.89, p=0.653) |
| num\_hhs\_group | < 5 members | - | - |
|  | 6 to 10 members | 0.67 (0.51-0.87, p=0.003) | 0.79 (0.58-1.07, p=0.127) |
|  | above 10 members | 0.82 (0.35-1.93, p=0.650) | 1.03 (0.42-2.54, p=0.948) |
| childage\_group | 0-10 months | - | - |
|  | 11-20 months | 1.46 (1.04-2.07, p=0.031) | 1.43 (0.99-2.07, p=0.057) |
|  | 21-30 months | 1.49 (1.01-2.20, p=0.047) | 1.65 (1.08-2.53, p=0.020) |
|  | 31-40 months | 0.97 (0.61-1.54, p=0.906) | 0.94 (0.57-1.56, p=0.817) |
|  | 41-50 months | 1.00 (0.54-1.87, p=0.995) | 1.04 (0.52-2.07, p=0.910) |
|  | 51-59 months | 0.45 (0.19-0.98, p=0.052) | 0.45 (0.18-1.06, p=0.077) |
| ancvisit | no visit | - | - |
|  | less than 4 | 1.77 (1.26-2.50, p=0.001) | 1.44 (1.00-2.09, p=0.052) |
|  | 4 and above | 2.85 (2.05-3.98, p<0.001) | 1.91 (1.29-2.85, p=0.001) |

**Fever descriptive**

| Characteristic | No treatment, N = 6521 | Treatment received, N = 4311 | p-value2 |
| --- | --- | --- | --- |
| childsex |  |  | 0.3476 |
| male | 335 (51%) | 234 (54%) |  |
| female | 317 (49%) | 197 (46%) |  |
| birth order number | 4.00 (2.00, 6.00) | 3.00 (2.00, 5.00) | 0.0004 |
| educlevel |  |  | 0.0000 |
| no education | 429 (66%) | 204 (47%) |  |
| primary | 174 (27%) | 156 (36%) |  |
| secondary | 40 (6.1%) | 40 (9.3%) |  |
| higher | 9 (1.4%) | 31 (7.2%) |  |
| marital\_status |  |  | 0.2328 |
| single | 19 (2.9%) | 7 (1.6%) |  |
| married | 594 (91%) | 403 (94%) |  |
| widowed | 7 (1.1%) | 1 (0.2%) |  |
| divorced | 32 (4.9%) | 20 (4.6%) |  |
| windex |  |  | 0.0000 |
| poorest | 260 (40%) | 90 (21%) |  |
| poorer | 122 (19%) | 59 (14%) |  |
| middle | 97 (15%) | 57 (13%) |  |
| richer | 78 (12%) | 74 (17%) |  |
| richest | 95 (15%) | 151 (35%) |  |
| residence |  |  | 0.0000 |
| urban | 77 (12%) | 149 (35%) |  |
| rural | 575 (88%) | 282 (65%) |  |
| health\_insurance | 20 (3.1%) | 21 (4.9%) | 0.1277 |
| hfdistance |  |  | 0.0000 |
| big problem | 398 (61%) | 192 (45%) |  |
| not a big problem | 254 (39%) | 239 (55%) |  |
| agegroups |  |  | 0.7358 |
| 15-24 | 182 (28%) | 129 (30%) |  |
| 25-34 | 317 (49%) | 211 (49%) |  |
| 35-44 | 142 (22%) | 86 (20%) |  |
| >45 | 11 (1.7%) | 5 (1.2%) |  |
| region |  |  | 0.0004 |
| tigray | 128 (20%) | 69 (16%) |  |
| afar | 68 (10%) | 49 (11%) |  |
| amhara | 65 (10.0%) | 28 (6.5%) |  |
| oromia | 104 (16%) | 66 (15%) |  |
| somali | 52 (8.0%) | 22 (5.1%) |  |
| benishangul | 30 (4.6%) | 21 (4.9%) |  |
| snnpr | 96 (15%) | 55 (13%) |  |
| gambela | 49 (7.5%) | 36 (8.4%) |  |
| harari | 18 (2.8%) | 24 (5.6%) |  |
| addis adaba | 21 (3.2%) | 34 (7.9%) |  |
| dire dawa | 21 (3.2%) | 27 (6.3%) |  |
| religion |  |  | 0.1060 |
| orthodox | 230 (35%) | 172 (40%) |  |
| catholic | 5 (0.8%) | 3 (0.7%) |  |
| protestant | 126 (19%) | 83 (19%) |  |
| muslin | 277 (42%) | 172 (40%) |  |
| traditional | 8 (1.2%) | 1 (0.2%) |  |
| other | 6 (0.9%) | 0 (0%) |  |
| hhhead\_sex |  |  | 0.8004 |
| male | 514 (79%) | 337 (78%) |  |
| female | 138 (21%) | 94 (22%) |  |
| pdelivery1 |  |  | 0.0000 |
| health fasility | 204 (31%) | 235 (55%) |  |
| home | 440 (67%) | 190 (44%) |  |
| other | 8 (1.2%) | 6 (1.4%) |  |
| u5children\_group |  |  | 0.1408 |
| 1 U5 child | 322 (49%) | 226 (52%) |  |
| 2 U5children | 237 (36%) | 161 (37%) |  |
| 3 or more U5children | 93 (14%) | 44 (10%) |  |
| num\_hhs\_group |  |  | 0.0004 |
| < 5 members | 281 (43%) | 238 (55%) |  |
| 6 to 10 members | 342 (52%) | 180 (42%) |  |
| above 10 members | 29 (4.4%) | 13 (3.0%) |  |
| childage\_group |  |  | 0.3573 |
| 0-10 months | 176 (27%) | 110 (26%) |  |
| 11-20 months | 188 (29%) | 120 (28%) |  |
| 21-30 months | 115 (18%) | 100 (23%) |  |
| 31-40 months | 82 (13%) | 46 (11%) |  |
| 41-50 months | 49 (7.5%) | 31 (7.2%) |  |
| 51-59 months | 42 (6.4%) | 24 (5.6%) |  |
| ancvisit |  |  | 0.0000 |
| no visit | 242 (37%) | 92 (21%) |  |
| less than 4 | 190 (29%) | 129 (30%) |  |
| 4 and above | 220 (34%) | 210 (49%) |  |
| 1n (%); Median (IQR) | | | |
| 2Pearson's Chi-squared test; Wilcoxon rank sum test; Fisher's exact test | | | |

**Fever model**

| Dependent: fevertreat |  | OR (univariable) | OR (multivariable) |
| --- | --- | --- | --- |
| educlevel | no education | - | - |
|  | primary | 1.89 (1.44-2.48, p<0.001) | 1.30 (0.96-1.77, p=0.089) |
|  | secondary | 2.10 (1.31-3.37, p=0.002) | 0.78 (0.45-1.35, p=0.379) |
|  | higher | 7.24 (3.52-16.42, p<0.001) | 1.90 (0.85-4.58, p=0.131) |
| marital\_status | single | - | - |
|  | married | 1.84 (0.80-4.75, p=0.172) | 2.94 (1.16-8.26, p=0.029) |
|  | widowed | 0.39 (0.02-2.79, p=0.413) | 0.76 (0.03-6.32, p=0.820) |
|  | divorced | 1.70 (0.62-5.00, p=0.315) | 2.82 (0.93-9.16, p=0.073) |
| windex | poorest | - | - |
|  | poorer | 1.40 (0.94-2.07, p=0.095) | 1.29 (0.86-1.94, p=0.213) |
|  | middle | 1.70 (1.13-2.54, p=0.011) | 1.43 (0.93-2.19, p=0.101) |
|  | richer | 2.74 (1.84-4.09, p<0.001) | 2.26 (1.48-3.45, p<0.001) |
|  | richest | 4.59 (3.24-6.55, p<0.001) | 1.64 (0.93-2.88, p=0.085) |
| residence | urban | - | - |
|  | rural | 0.25 (0.19-0.34, p<0.001) | 0.41 (0.24-0.70, p=0.001) |
| health\_insurance | no | - | - |
|  | yes | 1.62 (0.86-3.04, p=0.131) | 1.20 (0.60-2.37, p=0.605) |
| hfdistance | big problem | - | - |
|  | not a big problem | 1.95 (1.53-2.50, p<0.001) | 1.23 (0.92-1.64, p=0.160) |
| pdelivery1 | health fasility | - | - |
|  | home | 0.37 (0.29-0.48, p<0.001) | 0.71 (0.51-1.00, p=0.048) |
|  | other | 0.65 (0.21-1.90, p=0.434) | 1.12 (0.34-3.50, p=0.840) |
| u5children\_group | 1 U5 child | - | - |
|  | 2 U5children | 0.97 (0.74-1.26, p=0.808) | 1.40 (1.04-1.89, p=0.028) |
|  | 3 or more U5children | 0.67 (0.45-1.00, p=0.051) | 1.08 (0.68-1.69, p=0.746) |
| num\_hhs\_group | < 5 members | - | - |
|  | 6 to 10 members | 0.62 (0.48-0.80, p<0.001) | 0.78 (0.59-1.04, p=0.096) |
|  | above 10 members | 0.53 (0.26-1.02, p=0.065) | 0.75 (0.35-1.53, p=0.438) |
| ancvisit | no visit | - | - |
|  | less than 4 | 1.79 (1.29-2.48, p=0.001) | 1.30 (0.91-1.86, p=0.148) |
|  | 4 and above | 2.51 (1.85-3.42, p<0.001) | 1.11 (0.76-1.63, p=0.583) |