**Supplemental Digital Content 4.** Multivariable logistic regression analysis on antibiotic (ABX) use. Results are presented as odds ratios (standard errors).

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| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Sociodemographic characteristics | Immediate ABX prescription for pharyngitis | No urine culture before ABX in UTI | ABX efficacy within 24 ours | ABX other than amoxicillin | ABX administration in the last 12 months | ABX administration without evaluation by pediatrician | ABX prescription by phone call ≥20% of times | ABX prescription by phone message ≥20% of times | ABX self-prescription ≥20% of times | Influence pediatrician on ABX prescription ≥20% of times | Negative approach if pediatrician does not prescribe ABX | Pediatrician’s insistence on ABX administration when parents don’t find it necessary | Feel the pediatrician hasty on explanation about prescription |
| Age of parents (ref: both <30 y) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| ≤30 y & >30 y | 0.90 | 0.89 | 0.83 | 1.04 | 0.91 | 0.85 | 0.78 | 0.42\* | 1.03 | 0.79 | 0.74 | 0.68 | 1.10 |
| (0.23) | (0.38) | (0.24) | (0.19) | (0.16) | (0.28) | (0.20) | (0.15) | (0.39) | (0.27) | (0.23) | (0.24) | (0.26) |
| Both >30 y | 0.88 | 0.81 | 1.15 | 1.04 | 1.07 | 0.71 | 0.86 | 0.72 | 0.58 | 0.75 | 0.91 | 1.03 | 1.05 |
| (0.19) | (0.29) | (0.28) | (0.17) | (0.16) | (0.20) | (0.18) | (0.19) | (0.19) | (0.22) | (0.23) | (0.30) | (0.22) |
| Number of children (ref: 1) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 2 | 1.09 | 1.02 | 0.96 | 0.78\*\* | 1.25\*\* | 1.53\*\* | 1.41\*\* | 1.36\*\* | 1.36\* | 1.36\*\* | 0.79\* | 1.51\*\* | 0.89 |
| (0.09) | (0.14) | (0.09) | (0.05) | (0.07) | (0.15) | (0.11) | (0.14) | (0.17) | (0.15) | (0.09) | (0.17) | (0.07) |
| >2 | 1.06 | 1.02 | 0.93 | 0.86 | 0.98 | 2.36\*\* | 1.70\*\* | 1.69\*\* | 2.42\*\* | 1.31 | 0.70 | 1.53\* | 0.93 |
| (0.13) | (0.21) | (0.15) | (0.09) | (0.09) | (0.32) | (0.19) | (0.25) | (0.39) | (0.22) | (0.15) | (0.26) | (0.13) |
| Marital status (ref: married/cohab.) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Separated/divorced | 1.11 | 1.22 | 1.11 | 1.14 | 0.87 | 1.30 | 1.16 | 1.21 | 1.25 | 1.33 | 1.38 | 1.25 | 1.27 |
| (0.19) | (0.33) | (0.22) | (0.16) | (0.11) | (0.23) | (0.17) | (0.23) | (0.27) | (0.27) | (0.31) | (0.28) | (0.22) |
| Country of origin (ref: Italy) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Outside Italy | 1.52\* | 0.80 | 1.35 | 1.09 | 1.13 | 0.74 | 0.50\*\* | 0.43\*\* | 0.67 | 0.96 | 1.73\* | 1.26 | 1.33 |
| (0.28) | (0.31) | (0.26) | (0.15) | (0.15) | (0.18) | (0.10) | (0.14) | (0.21) | (0.24) | (0.37) | (0.28) | (0.22) |
| (0.16) | (0.55) | (0.63) | (0.23) | (0.18) | (0.37) | (0.27) | (0.45) | (0.37) | (0.43) | (0.44) | (0.41) | (0.35) |
| Educational attainment (ref: both secondary school) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Secondary & graduate school | 1.03 | 1.45\* | 1.10 | 0.98 | 0.81\*\* | 1.22 | 1.14 | 1.24 | 1.40\* | 1.34\* | 1.01 | 1.26 | 1.25\* |
| (0.09) | (0.22) | (0.12) | (0.07) | (0.05) | (0.13) | (0.09) | (0.14) | (0.18) | (0.16) | (0.13) | (0.15) | (0.12) |
| Both graduate school | 1.05 | 1.24 | 1.04 | 0.97 | 0.75\*\* | 1.41\*\* | 1.27\*\* | 1.35\*\* | 1.30 | 1.63\*\* | 0.78 | 1.36\* | 1.21 |
| (0.10) | (0.21) | (0.12) | (0.07) | (0.05) | (0.16) | (0.11) | (0.16) | (0.18) | (0.21) | (0.11) | (0.18) | (0.12) |
| Family net income (ref: <25,000 €/y) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 25,000–50,000 €/y | 0.98 | 0.84 | 0.82\* | 0.91 | 1.00 | 1.13 | 1.12 | 1.14 | 1.11 | 1.14 | 0.95 | 0.97 | 1.08 |
| (0.08) | (0.12) | (0.08) | (0.06) | (0.06) | (0.11) | (0.09) | (0.12) | (0.14) | (0.13) | (0.11) | (0.11) | (0.09) |
| >50,000 €/y | 0.57\*\* | 0.61\* | 0.68\* | 0.90 | 0.96 | 1.58\*\* | 1.23 | 1.38\* | 1.88\*\* | 0.96 | 0.64\* | 0.94 | 0.90 |
| (0.08) | (0.15) | (0.11) | (0.09) | (0.09) | (0.23) | (0.14) | (0.21) | (0.32) | (0.16) | (0.14) | (0.16) | (0.12) |
| Age of youngest/only child (ref: ≤2) |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 3–5 | 0.64\*\* | 1.36 | 0.78\* | 0.99 | 1.18\* | 2.07\*\* | 1.74\*\* | 1.53\*\* | 2.46\*\* | 1.71\*\* | 0.78 | 1.03 | 0.74\*\* |
| (0.06) | (0.24) | (0.09) | (0.07) | (0.08) | (0.29) | (0.17) | (0.21) | (0.43) | (0.24) | (0.10) | (0.13) | (0.07) |
| 6–10 | 0.53\*\* | 1.41 | 0.83 | 1.19\* | 0.56\*\* | 2.43\*\* | 2.54\*\* | 2.08\*\* | 3.13\*\* | 1.88\*\* | 0.72\* | 0.91 | 0.70\*\* |
| (0.06) | (0.27) | (0.10) | (0.10) | (0.04) | (0.35) | (0.27) | (0.29) | (0.58) | (0.29) | (0.11) | (0.13) | (0.08) |
| >10 | 0.53\*\* | 1.10 | 0.68\* | 1.51\*\* | 0.31\*\* | 3.42\*\* | 3.30\*\* | 2.44\*\* | 3.96\*\* | 2.07\*\* | 0.52\*\* | 0.78 | 0.63\*\* |
| (0.07) | (0.26) | (0.12) | (0.17) | (0.03) | (0.57) | (0.41) | (0.40) | (0.83) | (0.38) | (0.12) | (0.15) | (0.09) |
| Constant | 1.08 | 0.12\*\* | 0.13\*\* | 2.22\*\* | 1.30 | 0.03\*\* | 0.07\*\* | 0.04\*\* | 0.02\*\* | 0.03\*\* | 0.12\*\* | 0.06\*\* | 0.19\*\* |
| (0.25) | (0.04) | (0.03) | (0.38) | (0.21) | (0.01) | (0.02) | (0.01) | (0.01) | (0.01) | (0.03) | (0.02) | (0.04) |
| *Observations* | *3956* | *2953* | *6440* | *6405* | *6448* | *6450* | *6442* | *6450* | *6447* | *6441* | *6441* | *6444* | *6432* |

\*\* *p*<0.01, \* *p*<0.05.