**Table 3:** Factors associated with resistance to TMP/SMX and Ciprofloxacin *Escherichia coli* urinary isolates.

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | **TMP/SMX** | | | | **Ciprofloxacin** | | | |
| **Risk factors** | **No. (%) of isolates** | | **OR (95% CI)** | **P value** | **No. (%) of isolates** | | **OR (95% CI)** | **P value** |
| **S** | **R** | **S** | **R** |
| Overall | 4584 (81.7) | 1027 (18.3) |  |  | 5164 (92.2) | 438 (7.8) |  |  |
| **Gender** | | | | | | | | |
| Male | 274 (6.0) | 79 (7.7) | 1.32 (1.01-1.69) | 0.04 | 308 (6.0) | 44 (10.0) | 1.75 (1.27-2.44) | 0.0008 |
| Female | 4310 (94.0) | 948 (92.3) | 1 |  | 4856 (94.0) | 394 (90.0) | 1 |  |
| **Race** | | | | | | | | |
| Asian | 70 (1.5) | 43 (4.2) | 3.15 (2.14-4.65) | < 0.0001 | 101 (2.0) | 12 (2.7) | 1.53 (0.83-2.82) | 0.17 |
| Black | 480 (10.5) | 142 (13.8) | 1.52 (1.24-1.86) | < 0.0001 | 550 (10.6) | 71 (16.2) | 1.67 (1.27-2.19) | 0.0002 |
| White | 3773 (82.3) | 735 (71.6) | 1 |  | 4178 (80.9) | 324 (74.0) | 1 |  |
| **Health Insurance** | | | | | | | | |
| Yes | 4255 (92.8) | 957 (93.2) | 1.06 (0.81-1.38) | 0.68 | 4795 (92.9) | 408 (93.2) | 1.05 (0.71-1.54) | 0.82 |
| No | 329 (7.2) | 70 (6.8) | 1 |  | 369 (7.1) | 30 (6.8) | 1 |  |
| **Location** | | | | | | | | |
| Emergency Department | 530 (11.6) | 152 (14.8) | 1.08 (0.79-1.46) | 0.64 | 614 (11.9) | 68 (15.5) | 0.36 (0.26-0.51) | < 0.0001 |
| Outpatient | 3754 (81.9) | 795 (77.4) | 0.79 (0.61-1.03) | 0.08 | 4259 (82.5) | 281 (64.2) | 0.22 (0.17-0.28) | < 0.0001 |
| Inpatient | 300 (6.5) | 80 (7.8) | 1 |  | 291 (5.6) | 89 (20.3) | 1 |  |
| **History of Genitourinary Abnormality** | | | | | | | | |
| Yes | 347 (7.6) | 118 (11.5) | 1.59 (1.27-1.98) | < 0.0001 | 393 (7.6) | 71 (16.2) | 2.35 (1.79-3.09) | < 0.0001 |
| No | 4237 (92.4) | 909 (88.5) | 1 |  | 4771 (92.4) | 367 (83.8) | 1 |  |
| **History of Chronic Medication** | | | | | | | | |
| Yes | 217 (4.7) | 56 (5.5) | 1.16 (0.86-1.57) | 0.33 | 235 (4.6) | 38 (8.7) | 1.99 (1.39-2.85) | 0.0002 |
| No | 4367 (95.3) | 971 (94.5) | 1 |  | 4929 (95.4) | 400 (91.3) | 1 |  |
| **Mode of Urine Collection** | | | | | | | | |
| Catheterized | 170 (3.7) | 73 (7.1) | 1.99 (1.50-2.64) | < 0.0001 | 175 (3.4) | 68 (15.5) | 5.24 (3.89-7.07) | < 0.0001 |
| Void | 4414 (96.3) | 954 (92.9) | 1 |  | 4989 (96.6) | 370 (84.5) | 1 |  |
| **Diabetes** | | | | | | | | |
| Yes | 579 (12.6) | 170 (16.6) | 1.37 (1.14-1.65) | 0.0009 | 635 (12.3) | 114 (26.0) | 2.51 (2.00-3.16) | < 0.0001 |
| No | 4005 (87.4) | 858 (83.4) | 1 |  | 4529 (87.7) | 324 (74.0) | 1 |  |
| **Cancer** | | | | | | | | |
| Yes | 308 (6.7) | 69 (6.7) | 1.00 (0.76-1.31) | 1 | 316 (6.1) | 61 (13.9) | 2.48 (1.85-3.33) | < 0.0001 |
| No | 4276 (93.3) | 958 (93.3) | 1 |  | 4848 (93.9) | 377 (86.1) | 1 |  |
| Age |  |  | 0.99 (0.99-1.00) | 0.0036 |  |  | 1.03 (1.02-1.04) | < 0.0001 |
| **Previous Diagnosis of UTI** | | | | | | | | |
| 0 (reference) | 2630 (57.4) | 532 (51.8) | 1 |  | 2996 (58.0) | 160 (36.5) | 1 |  |
| 1 | 944 (20.6) | 182 (17.7) | 0.95 (0.79-1.15) | 0.61 | 1044 (20.2) | 80 (18.3) | 1.44 (1.09-1.89) | 0.01 |
| 2 | 298 (8.7) | 92 (9.0) | 1.14 (0.89-1.46) | 0.29 | 446 (8.6) | 44 (10.1) | 1.85 (1.30-2.62) | 0.0006 |
| 3 | 194 (4.2) | 56 (5.5) | 1.43 (1.05-1.95) | 0.025 | 224 (4.3) | 26 (5.9) | 2.17 (1.41-3.36) | 0.0005 |
| 4 | 111 (2.4) | 40 (3.9) | 1.78 (1.23-2.59) | 0.0024 | 130 (2.5) | 20 (4.6) | 2.88 (1.75-4.74) | < 0.0001 |
| 05-Oct | 213 (4.7) | 82 (8.0) | 1.90 (1.45-2.50) | < 0.0001 | 239 (4.6) | 56 (12.8) | 4.39 (3.15-6.11) | < 0.0001 |
| > 10 | 94 (2.1) | 43 (4.2) | 2.26 (1.56-3.28) | < 0001 | 85 (1.7) | 52 (11.9) | 11.46 (7.83-16.75) | < 0.0001 |
| **Hospitalization** | | | | | | | | |
| 0 (reference) | 4415 (96.3) | 966 (94.1) | 1 |  | 5016 (97.1) | 357 (81.5) | 1 |  |
| 1 | 102 (2.2) | 38 (3.7) | 1.70 (1.17-2.49) | 0.006 | 89 (1.7) | 51 (11.6) | 8.05 (5.62-11.55) | < 0.0001 |
| ≥ 2 | 67 (1.5) | 23 (2.2) | 1.57 (0.97-2.53) | 0.07 | 59 (1.1) | 30 (6.9) | 7.14 (4.54-11.23) | < 0.0001 |
| **Obesity** | | | | | | | | |
| BMI < 25 | 1887 (41.2) | 422 (41.1) | 1 |  | 2157 (41.8) | 148 (33.8) | 1 |  |
| BMI 25-29.9 | 1074 (23.4) | 227 (22.1) | 0.95 (0.79-1.13) | 0.53 | 1215 (23.5) | 84 (19.2) | 1.01 (0.76-1.33) | 0.96 |
| BMI ≥ 30 | 1623 (35.4) | 378 (36.8) | 1.04 (0.89-1.22) | 0.61 | 1792 (34.7) | 206 (47.0) | 1.68 (1.34-2.09) | < 0.0001 |
| **Antibiotic Prescribed in Past 6 Months** | | | | | | | | |
| 0 (reference) | 1190 (26.0) | 185 (18.0) | 1 |  | 1302 (25.2) | 71 (16.2) | 1 |  |
| 1 | 1698 (37.0) | 321 (31.3) | 1.22 (1.00-1.48) | 0.05 | 1930 (37.4) | 85 (19.4) | 0.81 (0.59-1.12) | 0.19 |
| 02-Mar | 1151 (25.1) | 307 (29.9) | 1.72 (1.41-2.10) | < 0.0001 | 1334 (25.8) | 122 (27.9) | 1.68 (1.24-2.27) | 0.0008 |
| 04-May | 310 (6.8) | 107 (10.4) | 2.22 (1.70-2.91) | < 0.0001 | 361 (7.0) | 56 (12.8) | 2.85 (1.97-4.12) | < 0.0001 |
| > 5 | 235 (5.1) | 107 (10.4) | 2.93 (2.22-3.86) | < 0.0001 | 237 (4.6) | 104 (23.7) | 8.05 (5.77-11.22) | < 0.0001 |

**Abbreviation:** TMP/SMX: Trimethoprim/Sulfamethoxazole; OR: Odds ratio.