# Supplemental tables

Table 1: Demographic and clinical characteristics among patients enrolled in a point-prevalence survey of antimicrobial use, Southern Province, Sri Lanka, 2017

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Characteristic** | **Total Patients (N = 1,709)** | **Patients on Antimicrobials** **(N = 935)** | **Patients Not on Antimicrobials (N = 774)** | **P Values** |
|  | **No. or median** | **% or IQRc**  | **No. or median** | **% or IQR** | **No. or median** | **% or IQR** |
| **Age, years** | 42.2 | 21.0-63.0 | 43.1 | 20.0-64.0 | 41.1 | 22.0-60.7 | 0.053 |
| **Gender** |  |  |  |  |  |  |  |
|  Male | 950 | 55.6 | 530 | 55.8 | 420 | 44.2 | 0.332 |
| **Hospitalization Durationa, days**  | 5.9 | 2.0-6.0 | 7.0 | 3.0-8.0 | 4.5 | 2.0-4.0 | <0.001 |
| **Antimicrobial Allergy** |  |  |  |  |  |  |  |
|  Available | 25 | 1.5 | 20 | 2.1 | 5 | 0.6 | 0.019 |
| **Chronic Medical Conditions** |  |  |  |  |  |  |  |
|  Total patients with chronic medical conditions | 689 | 40.3 | 428 | 45.8 | 261 | 33.7 | <0.001 |
|  Cardiovascular disease | 346 | 20.2 | 196 | 21.0 | 150 | 19.4 | 0.479 |
|  Neurologic disease | 40 | 2.3 | 20 | 2.1 | 20 | 2.6 | 0.647 |
|  Psychiatric disease | 9 | 0.5 | 6 | 0.6 | 3 | 0.4 | 0.703 |
|  Renal/Genitourinary disease | 51 | 3.0 | 35 | 3.7 | 16 | 2.1 | 0.061 |
|  Endocrine disease | 283 | 16.6 | 180 | 19.2 | 103 | 13.3 | 0.001 |
|  Pulmonary disease | 144 | 8.4 | 102 | 10.9 | 42 | 5.4 | <0.001 |
|  Gastrointestinal disease | 33 | 1.9 | 19 | 2.0 | 14 | 1.8 | 0.884 |
|  Hematologic disease | 15 | 0.9 | 8 | 0.9 | 7 | 0.9 | 1.000 |
|  Rheumatologic disease/Arthritis | 19 | 1.1 | 10 | 1.1 | 9 | 1.2 | 1.000 |
|  Malignancy | 19 | 1.1 | 14 | 1.5 | 5 | 0.6 | 0.153 |
|  Other | 58 | 3.4 | 41 | 4.4 | 17 | 2.2 | 0.019 |
| **Admission Diagnosisb** |  |  |  |  |  |  |  |
|  Dengue fever | 311 | 18.2 | 43 | 4.6 | 268 | 34.6 | <0.001 |
|  Acute lower respiratory infection | 126 | 7.4 | 125 | 13.4 | 1 | 0.1 | <0.001 |
|  Cellulitis and acute lymphangitis | 98 | 5.7 | 96 | 10.3 | 2 | 0.3 | <0.001 |
|  Fever of unknown origin | 97 | 5.7 | 53 | 5.7 | 44 | 5.7 | 1.000 |
|  Disorders of the urinary system | 62 | 3.6 | 61 | 6.5 | 1 | 0.1 | <0.001 |
|  Acute myocardial infarction | 42 | 2.5 | 11 | 1.2 | 31 | 4.0 | <0.001 |
|   Infectious gastroenteritis and colitis | 38 | 2.2 | 18 | 1.9 | 20 | 2.6 | 0.450 |
|  Asthma | 35 | 2.0 | 26 | 2.8 | 9 | 1.2 | 0.029 |
|  Pain in throat and chest | 31 | 1.8 | 5 | 0.5 | 26 | 3.4 | <0.001 |
|  Sepsis | 27 | 1.6 | 27 | 2.9 | 0 | 0 | <0.001 |
|  Nausea and vomiting | 25 | 1.5 | 13 | 1.4 | 12 | 1.5 | 0.943 |
|  Open wound of ankle, foot and toes | 24 | 1.4 | 21 | 2.2 | 3 | 0.4 | 0.002 |
|  Fracture of lower leg | 22 | 1.3 | 18 | 1.9 | 4 | 0.5 | 0.018 |
|  Disorders of vestibular function | 21 | 1.2 | 5 | 0.5 | 16 | 2.1 | 0.008 |

a At time of enrollment.

b Only diagnoses attributed to 20 patients or more are listed.

c The interquartile range corresponds to 25th - 75th percentile.

Table 2: Indications for antimicrobial use, organized by type of ward, southern Sri Lanka, 2017

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Characteristic** | **Total Patients on** **Antimicrobials****(N = 935)** | **Medical Wards** **(N = 406)** | **Surgical Wards****(N = 316)** | **Pediatric Wards****(N = 135)** | **Intensive Care Units (N = 78)** | **P Values** |
| **No.** | **%** | **No.** | **%** | **No.** | **%** | **No.** | **%** | **No.** | **%** |
| **Indication for Antimicrobials Present** |  |  |  |  |  |  |  |  |  |  |  |
|  Yes | 779 | **83.3** | 330 | **81.3** | 260 | **82.3** | 117 | **86.7** | 72 | **92.3** | **0.076** |
|  Per chart | 350 | **37.4** | 136 | **33.5** | 127 | **40.2** | 65 | **48.1** | 22 | **28.2** | **0.004** |
|  Inferred | 428 | **45.8** | 194 | **47.8** | 132 | **41.8** | 52 | **38.5** | 50 | **64.1** | **0.001** |
| **Number of Indications** |  |  |  |  |  |  |  |  |  |  |  |
|  1 | 750 | **80.2** | 318 | **78.3** | 251 | **79.4** | 117 | **86.7** | 64 | **82.1** | **0.206** |
|  2 | 25 | **2.7** | 11 | **2.7** | 7 | **2.2** | 0 | **0** | 7 | **9.0** | **0.001** |
|  >= 3 | 2 | **0.2** | 1 | **0.2** | 0 | **0** | 0 | **0** | 1 | **1.3** | **0.161** |
| **Number of Antimicrobial Agents** |  |  |  |  |  |  |  |  |  |  |  |
|  1 | 485 | **51.9** | 226 | **55.7** | 141 | **44.6** | 94 | **69.6** | 24 | **30.8** | **<0.001** |
|  2 | 338 | **36.1** | 147 | **36.2** | 130 | **41.1** | 34 | **25.2** | 27 | **34.6** |
|  3 | 93 | **9.9** | 28 | **6.9** | 41 | **13.0** | 7 | **5.2** | 17 | **21.8** |
|  4 | 16 | **1.7** | 5 | **1.2** | 3 | **0.9** | 0 | **0** | 8 | **10.3** |
|  5 | 2 | **0.2** | 0 | **0** | 0 | **0** | 0 | **0** | 2 | **2.6** |
| **Indicationsa,b** |  |  |  |  |  |  |  |  |  |  |  |
|  Lower respiratory infection/Pneumonia | 194 | **20.7** | 121 | **29.8** | 3 | **0.9** | 56 | **41.5** | 14 | **17.9** | **<0.001** |
|  Cellulitis/Abscess/Soft tissue infection | 181 | **19.4** | 51 | **12.6** | 125 | **39.5** | 2 | **1.5** | 3 | **3.8** | **<0.001** |
|  Urinary tract infection/Pyelonephritis | 91 | **9.7** | 54 | **13.3** | 25 | **7.9** | 11 | **8.1** | 1 | **1.3** | **0.003** |
|  Surgical prophylaxis | 73 | **7.8** | 1 | **0.2** | 54 | **17.1** | 1 | **0.7** | 17 | **21.8** | **<0.001** |
|  Upper respiratory infection | 40 | **4.3** | 22 | **5.4** | 0 | **0** | 18 | **13.3** | 0 | **0** | **<0.001** |
|  Primary bacteremia | 34 | **3.6** | 10 | **2.5** | 1 | **0.3** | 5 | **3.7** | 18 | **23.1** | **<0.001** |
|  Meningitis/Encephalitis | 23 | **2.5** | 13 | **3.2** | 0 | **0** | 5 | **3.7** | 5 | **6.4** | **0.002** |
|  Infected wound | 21 | **2.2** | 3 | **0.7** | 18 | **5.7** | 0 | **0** | 0 | **0** | **<0.001** |
|  Leptospirosis | 18 | **1.9** | 14 | **3.4** | 1 | **0.3** | 0 | **0** | 3 | **3.8** | **0.004** |
|  Fractures | 18 | **1.9** | 2 | **0.5** | 14 | **4.4** | 0 | **0** | 2 | **2.6** | **<0.001** |
|  Fever of unclear etiology | 10 | **1.1** | 2 | **0.5** | 0 | **0** | 5 | **3.7** | 3 | **3.8** | **<0.001** |
|  Secondary bacteremia | 10 | **1.1** | 5 | **1.2** | 1 | **0.3** | 0 | **0** | 4 | **5.1** | **0.002** |
| **Culture Resultc** |  |  |  |  |  |  |  |  |  |  |  |
|  None ordered/ available | 798 | **85.3** | 356 | **87.7** | 281 | **88.9** | 120 | **88.9** | 41 | **52.6** | **<0.001** |
|  Positive | 57 | **6.1** | 20 | **4.9** | 14 | **4.4** | 4 | **3.0** | 19 | **24.3** | **<0.001** |
| **Potentially Inappropriate Antimicrobial Use** |  |  |  |  |  |  |  |  |  |  |  |
|  Double anaerobic coverage | 86 | **9.2** | 14 | **3.4** | 53 | **16.8** | 1 | **0.7** | 18 | **23.1** | **<0.001** |
|  Double beta-lactam combination | 71 | **7.6** | 31 | **7.6** | 27 | **8.5** | 6 | **4.4** | 7 | **9.0** | **<0.001** |
|  Double Pseudomonas coverage | 14 | **1.5** | 3 | **0.7** | 5 | **1.6** | 0 | **0** | 6 | **7.7** | **<0.001** |
|  Double MRSA coveraged | 3 | **0.3** | 0 | **0** | 2 | **0.6** | 0 | **0** | 1 | **1.3** | **<0.001** |

a Patients may have more than one indication thus the total percentage of patients in patients with indications is not 100%.

b Indications that have less than 10 patients are listed in the text.

c Culture result relevant to the indication for antimicrobials.

d MRSA = methicillin-resistant *Staphylococcus aureus*